

THE TRADITION OF SAINTS MAKING SACRIFICES FOR THE GANGA

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Dedicated to that religious-human spirit which prefers to offer self-sacrifice rather than perpetrate violence over nature, including other human beings.



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FOREWORD

he existence of the human depends upon the existence of nature as well as other creatures of the universe. If nature is harmed it affects all creatures including human beings. Nature mainly consists of trees, plants, the river and its uninterrupted flow etc. Nature has two parts, external and internal. If the external part is healthy, the internal part will be in peace and harmony. If the internal part is engrossed in greed, lust etc. it will destroy the external part. This is why the Rishis of the Vedic era used to pray that they should be born in a place where external nature is in its natural form so that it will be easy for them to be in contact with the supreme. Atharvaveda describes it in following words:

यस्यां समुद्र उत सिन्धुरापो यस्यामन्तं कृष्टयः संबभृद्यः। यस्यामिदं जिन्वति प्राणदेजत् सा नो भूमिः पूर्वपेये दधातु ॥ अथर्व12.1.3 yasyām samudra uta sindhurāpo yasyāmannam kṛṣṭayaḥ sambabhūvuḥl yasyāmidaṃ jinvati prāṇadejat sā no bhūmiḥ pūrvapeye dadhātu || atharva 12.1.3

Meaning, "Where exist sea, rivers, water and fertile land yielding crops and the vital living energy of our body is satisfied and we can get the fruits in the form of liquids which remain available."

It is not only that the Rishis wanted the natural environment to have ample water resources and eatable and drinkable food but they also wanted that the river should flow without any interruption. Atharvaveda further describes it as:

> यस्यामापः परिचराः समानीरहोरात्रे अप्रमादं क्षरन्ति । सा नो भूमिर्भूरिधारा पयो दुहामथो उक्षतु वर्चसा ॥ अथर्व12.1.9

yasyāmāpaḥ paricarāḥ samānīrahorātre apramādaṃ kṣaranti | sā no bhūmirbhūridhārā payo duhāmatho ukṣatu varcasā ||atharva 12.1.9

Meaning, "Where water is flowing in tandem with latitudinal, longitudinal and horizontal connectivity without any disturbance/hindrance day and night, please provide us that land which will give us milk like nutritious crops to empower us with all uplifting qualities."

Especially in India this is why rivers are treated not only as living entities but were given the position of Gods and Goddesses.

In Indian literature there are many stories which indicate that Rishis have done tapas to bring rivers from heaven to earth. Among all the rivers in India, Gangajee has a special position. Every spiritual Indian wants, at least once in his lifetime, to have a dip in the Ganga. At the time of the death of a person a drop of Gangajal is put into his mouth and after death the ashes are immersed in Gangajee.

It is said in many Puranas that king Bhagirath brought the Ganga from heaven to earth after doing tapasya. Previously his ancestors Anshuman and Dilip had not succeeded in doing so even after sacrificing their lives doing tapasya.

It is said in the Srimadbhagwad Mahapuran that when Ganga was ready to come down to earth she had posed two questions:

- 1. The earth will not be able to stop her flow, so what will happen?
- 2. The people will pollute her pure water with their sins, who will redeem her?

Bhagirath gave her assurance that he will do the tapas to please Lord Shiva and he will bear the flow of her water first in his Jata (hairlocks) and then she will be released onto the earth. It is said in the Mahabharat that:

एतस्याः सलिलं मूर्घ्नि वृषाङ्कः पर्यघारयत् । गङ्गाद्वारे महाभाग येन लोकस्थितिर्भवेत् ॥

Chapter 142 Verse 9. Mahabharat.

(Gita Press Gorakhpur Publication Part-2, Vanparva, Book Code-33)

etasyāḥ salilaṃ mūrdhni vṛṣāṅkaḥ paryadhārayat gaṅgādvāre mahābhāga yena lokasthitirbhavet

Meaning, "Lord Shiva took the brunt of Ganga ji's flow on his head (hairlocks) at his place/Gangadwar (Haridwar) and so Gangaji did not pierce the earth and started flowing downwards."

In scientific language it may be said that the boulders and stones which are in the bed of the Ganga in Haridwar combat the flow of water otherwise the Ganga will disappear here.

And to the second question Bhagirath assured Ganga that:

साधवो न्यासिनः शान्ता ब्रह्मिष्ठा लोकपावनाः ।

हरन्यधं तेंऽगसंगात् तेष्वास्ते ह्यधभिद्हरिः ॥ श्रीमद्रागवत 9.9.6

Sādhavo nyāsinaḥ śāntā brahmiṣṭhā lokapāvanāḥ harantyaghaṃ teṃ'gasaṃgāt teṣvāste hyaghabhidhariḥ

Meaning, "Who have renounced the world, controlled their senses to reside in peace forever, have full faith in the Supreme and are capable of purifying the people with their good deeds, will remove your sin by bathing in you and, if necessary, dissolving their bodies, because the sin remover God resides in their hearts." We are saints. We are only fulfilling the assurance that our ancestor Rishi Bhagirath has given to the Goddess Ganga. At the same time we also remember that the Vedas say that when all worldly persons are asleep, immersed in ignorance, only Rishis are awakened.

वयं राष्ट्रे जागृयाम पुरोहिताः - शुक्ल यजुर्वेद 9.23

vayam rāṣṭre jāgṛyāma purohitāḥ śukla yajurveda 9.23

Meaning, "Only we Rishis remain awakened".

Therefore, when ignorant people are destroying their very lifeline, i.e. rivers, we, the saints, are ready to sacrifice ourselves by doing tapas to make them realize their mistakes.

Our struggle started in 1998. Since then, 61 Satyagrahs have taken place in Matri Sadan. We had to face many odds, some of which are as below:

- In 2000 when I was on Satyagrah taking only lemon, water and salt, I was put in jail and heavy arsenic poison was given to me by injecting arsenic solution in my lemon.
- In 2003 our saint Swami Gokulanand Saraswati was murdered in a remote village of Nainital by injecting him with 'Scholin'.
- In 2011 Swami Nigmanand Saraswati was killed by giving him organophosphate poison in a government hospital at Haridwar.

- 4. In 2018 Swami Gyan Swaroop Sanand was killed in a government hospital in Rishikesh, apparently due to the deficiency of Potassium. (It is to be noted that he was taking lemon, salt and honey which contains potassium.)
- 5. Again in 2018 an attempt was made to kill Brahmchari Aatmbodhanand by giving him Brucine in the same hospital where Swami Sanand was killed. Previously also, in 2017, he had to face problems in Doon Hospital, Dehradun.

Apart from these, many attempts were made to kill me in different ways by the Government and its officials. This is evident from the fact that they refuse to record any complaints and the persons involved in such conspiracies are rewarded. As an outrageous example, after the recent murder of Swami Sanand Jee, the director of the hospital where he was killed and Brahmchari Aatmbodhanand was poisoned, was awarded with the Padamshree.

The nexus of corrupt officers and politicians can do anything. Even the role of the judiciary is not clean.

In such a grim situation the most peaceful way of Satyagrah is the only way left for us.

The Central Government claims that they are expending a lot of money to clean Gangajee. In our opinion the Ganga needs no money, it requires only an earnest, truthful approach.

- 1. All the dams, proposed and under construction, should be scrapped forthwith.
- 2. The existing dams should first start giving e-flow as per the recommendation of I.I.T. Consortium and be slowly decommissioned.
- 3. Sewage water, treated or untreated, should not go into the Ganga. It should be the responsibility of the concerned municipality and corporation to treat it and use it in whatever manner they think proper.
- 4. All non-polluting factories should be located five kilometers away and polluting factories should be located ten kilometers away from Gangajee.
- 5. No mining should be allowed in Gangajee and its tributaries.
- Only organic farming should be allowed within 10 kilometers of Gangajee.

If these conditions are adhered to strictly, Gangajee will become as pure as it was a thousand years ago.

To oversee the implementation of these, as demanded by Swami Sanand jee, an autonomous Ganga Parishad should be formed.

But this simple solution has become so grievous that many saints had to sacrifice their lives and others are in the queue willing to offer sacrifices. This is because the government on one hand is expending thousands of crores to clean the Ganga and on the other trying to earn money from it. The situation is so grave that it is said that a company which has a dam on the Alaknanda is not ready to release more than 5% e-flow. What a shocking situation in India that such companies are controlling the age-old Ganga Jee who is sacred for crores of people. Such companies should be blacklisted and such mentalities should be crushed immediately.

The approach of Shri Sandeep Pandey ji to focus on some of the incidents of the saints sacrificing their lives for Ganga jee is good. It will make people conscious and one day the government will realize the truth, so that the Ganga can regain her pristine form.

Swami Shivanand Founder/President Matri Sadan, Jagjeetpur, Kankhal, Haridwar

PREFACE

So far four saints have died for the cause of the Ganga, three after fasting for more than a hundred days each and one murdered by the mining mafia. More have committed to continue this series of fasting and sacrificing their lives if the government does not listen to their demand of ensuring an Aviral and Nirmal, i.e. free flowing and clean, Ganga.

Among the dead was Guru Das Agrawal, former Professor at the Indian Institute of Technology at Kanpur who had become a saint in 2011 and has been known as Swami Gyan Swaroop Sanand since. He had very clearly articulated a demand for a law for the conservation of the Ganga and had even prepared a draft Bill with the help of some like-minded colleagues during the Manmohan Singh government.

I met Professor Agrawal twice during his fatal fast in 2018 and always believed that the government would intervene at the last moment to save his life. It was a big setback that the government let him die. The media was not cooperating and hence people did not know about his fast. A last ditch attempt was made to put an advertisement in a newspaper to attract the government's attention. But alas! before we could raise the required two lakh rupees to put out an advertisement in the largest read Hindi newspaper, he was no more. He beat us in this race against time. He was always ahead of us.

I will always feel guilty that we did not do enough to save his life. Hence I decided to bring out this small book so that people can know that the government and society just let one of their best scientists and a very fine and sensitive human being, who cared for the entire human race, die without paying attention to what he was saying.

How many saints and people will have to sacrifice their lives before society becomes sensitive enough? This is not just about the Ganga. This is about how we can live together caring for each other and for the environment that we live in. We are headed towards a disaster – both human and environmental. An old wise man was trying to point this out to us. But we did not listen to him.

Tied to the story of Prof. Agrawal is the story of Matri Sadan, which he chose as the site of his three fasts including the last one. Matri Sadan, headed by a former Chemistry teacher now known as Swami Shivanand Saraswati, has demonstrated amazing grit to take on the sand-mining mafia, which is in collusion with politicians, bureaucrats and even the courts.

A nondescript ashram in Haridwar, marginalised by society and the religious community alike, did not have any attraction for the ascendant politics of Hindutva, but was bracing itself for tougher battles ahead while ever-prepared to sacrifice the lives of its inmates. The story of Matri Sadan is an amazing story of commitment and sacrifices.

The purpose of this book is to make people aware of the tremendous sacrifices being made by saints for the sake of the Ganga and to acknowledge their contributions.

One person I would like to thank for helping me by providing feedback on the draft and especially for his help with diacritics on the transliteration of Sanskrit slokas is Pranav Kumar Vasishta, an ardent disciple of Swami Gyan Swaroop Sanand. His penchant for puritanism has helped improve the quality of this work.

I would also like to thank Prof. P.R.K. Rao, a former colleague of Prof. G.D. Agrawal from his IIT Kanpur days, who sensitised his former colleagues and students while Prof. G.D. Agrawal was on his fast-unto-death in Haridwar. It was because of his e-mails to the group of mostly people associated with IIT Kanpur in the past and present that I started taking more notice of the fast which was otherwise blacked out by the national media.

I would also like to thank my friends Prithvi Raj Sharma of India Friends Association in California, D.P. Prakash, Professors George Leitmann, my Ph.D. guide at University of California, Berkeley, Ye-Hwa Chen, my Masters guide at Syracuse University, presently at Georgia Tech, Mohan Bhagat, Emeritus Professor at University of Maryland, Prajit Kumar Basu, Ashok Jhunjhunwala, Naresh Kumar Sharma and Abhjijit Mitra without whose invaluable support this effort may not have been possible. Professors Rajeev Sangal and P.J. Narayanan at International Institute for Information Technology at Hyderabad were kind enough to host me at the institute which allowed me to finish this small book smoothly.

Sandeep

INTRODUCTION

Swami Gyan Swaroop Sanand, formerly known as Professor Guru Das Agrawal, like a true saint chose the manner and time of his death. When I met him on 23rd September 2018, on the 95th day of his fast unto death and was taking leave of him, as a matter of habit, I said that I would see him again soon. He retorted that this was unlikely, as he would give up water on 9th October and then it would only be a matter of 2 or 3 days before he passes away. Even though everybody knows that they are mortal, one rarely meets people in life who are mentally prepared for their end.

The legendary Professor Guru Das Agrawal got promoted from Lecturer directly to Professor at the prestigious Indian Institute of Technology at Kanpur after having finished his Ph.D. from University of California at Berkeley in just two years. He laid the foundation of India's anti-pollution regimen as a Member-Secretary of the Central Pollution Control Board. Yet, he ultimately failed to convince the government about his

viewpoint on the rejuvenation of the river Ganga and had to pay for this with his life.

He died on 11th October 2018 after 112 days of fasting on just lemon water and honey, the last three days of which were without any water at all. A life sketch of Prof. Agrawal is given in Appendix I.



Swami Gyan Swaroop Sanand being forcibly taken away by the police from Matri Sadan Ashram to be admitted at AIIMS

It may be intriguing why the government, which rode to power on a Hindutva agenda, did not listen to a Hindu saint (which he had become in 2011 at the age of 79) on an issue of as great ecological and religious significance as that of the Ganga, which was at the core of the current Prime Minister's election campaign in 2014.

Prof. Agrawal was a deeply religious man but at the same time a meticulous scientist. He considered the

Ganga as his mother and believed that it was no ordinary river. He, like all Hindus, believed that the water of the Ganga has some special qualities because of which the river is holier than any other river in the world, be it the Nile, Euphrates, Thames, Danube, Missisippi or the Indus. As a scientist he described these qualities as bactericidal, disease-curing, health-promoting, non-putrefying and purifying properties, which were at greater levels than in any other waterbody.

A 2018 National Environment Engineering Research Institute, Nagpur report reveals in a comparative study of three rivers – Ganga, Yamuna and Narmada – that a higher number of bacteriophages against pathogenic bacterial species are present in the Ganga relative to the other two rivers, which is an endorsement of Prof. Agrawal's belief.

According to the report, an interaction of water and sediment enhanced the anti-microbial activity in the Ganga whereas the same increased the Escherichia Coli bacteria count in Narmada and Yamuna. The study revealed a variety of different phages that are reported to have specific bacterial activity against clinical isolates and pathogens even in the contaminated stretch of the river Ganga in Uttar Pradesh, which was a welcome surprise even for Prof. Agrawal.

Prof. Agrawal went on fast six times and was committed to laying down his life for the sake of the Ganga. He said to his well-wishers that they should worry more about the health of the Ganga than his. He thought that it was too late to redeem the situation.

He was critical of the Swachcha Bharat Abhiyan. He didn't think that a few people picking up brooms can clean a local area. The pollution according to him was a result of flawed developmental policies. A pro-ecology development policy was necessary for sustainable development. But the Narendra Modi government had not even uttered the phrase 'sustainable development' once in the four and a half years of their first regime till Prof. Agrawal was alive. Development for the government meant construction.

Prof. Agrawal thought that the idea of development being pursued was in conflict with the health of the environment and he didn't think the Ganga could be saved unless the task was given to people who were sensitive towards it. He had little faith in the government or the bureaucracy being able to do the job.

The issue of the uninterrupted flow of the Ganga was first raised by Madan Mohan Malviya who ran a campaign for this in Haridwar and convinced the British to agree to the idea. The issue of development at the cost of the environment in the Himalayas was first raised by the Gandhian social activist Sundarlal Bahuguna in the '80s when he gave the slogan "Ecology is permanent economy".

Bahuguna fasted several times on the banks of the Bhagirathi against the Tehri dam and convinced two Prime Ministers, P.V. Narasimha Rao and H.D. Deve Gowda to review the project. But ultimately the dam was built and he had to be evacuated from the dam site in 2004 when its reservoir was being filled. Prof. Agrawal fasted five times during the United Progressive Alliance regime. However, he never faced a threat to his life. The only time he fasted during the National Democratic Alliance government's tenure it proved fatal for him. This demonstrates how the prevalent developmental paradigm is not sensitive to sociocultural issues, including religion, or environmental issues—in spite of the PM having won a United Nations award—and is more brazenly pro-corporate and less humane under the present government.

The vacuum created by Prof. G.D. Agrawal's demise seems almost unfillable. Where is another strong voice for the Ganga? To many religious-minded people Prof. Agrawal appeared to be in the mould of the mythological figure Bhagirath, almost single handedly taking up the cause of the Ganga. Bhagirath wanted the river Ganga to flow on the earth and so did Prof. Agrawal.

As Medha Patkar ji has so aptly stated: "A true condolence to Professor G.D. Agrawal would be to brace ourselves for the fight against governments which believe in a concept of development with attendant destruction of nature, corporations which implement such misplaced and misgoverned ideas of governments, and contractors plundering natural resources including sand from the riverbed and the catchment — all three insensitive to human beings in the name of 'development'."

The fight for the conservation of the Ganga is far from over. The chief priest of Matri Sadan — the ashram in Haridwar Prof. Agrawal chose as the site of his last fast

— Swami Shivanand Saraswati had warned Narendra Modi that after Swami Sanand he and his disciples will ensure that the chain of fasting doesn't break.

Appendix II is a record of the valiant struggle in the form of sixty-one fasts conducted by Matri Sadan saints so far under the brave leadership of Swami Shivanand, to protect the Ganga.

Before Swami Sanand's demise two other saints associated with Matri Sadan lost their lives. Swami Nigmanand laid down his life in 2011 on the 115th day of his fast, which is alleged to be a murder at the behest of a mining mafia associated with the then ruling Bhartiya Janata Party government in Uttarakhand.

Swami Gokulanand, who fasted with Swami Nigmanand the first time in 1998 against sand mining, was murdered by the mining mafia in 2003. Baba Nagnath died after fasting independently for 114 days in Varanasi for the cause of the Ganga in 2014. How many more lives will be sacrificed at the altar of development?

It is interesting that all those who have been involved in the struggle to save the Ganga, from Sundarlal Bahuguna to Prof. G.D. Agrawal to the other saints of Matri Sadan, have questioned the greed driven model of modern development and supported the idea of development based on co-existence with nature in the Gandhian mould, and their methods have also been Gandhian.

Gandhi was quite clear that he was not merely interested in emancipating India from British rule but wanted Indians to be free from the slavery of technology. His idea of non-stealing — one of the vows among the eleven he expected people to take when they wanted to join public service — was that possessing anything which was not needed was akin to stealing. The first three of these vows were truth, non-violence and celibacy. Swami Shivanand says their tools to fight corruption are truth and celibacy.

Like Gandhi, the Matri Sadan saints are also involved in trying to liberate humanity from being engaged in the satiation of their senses and attachment to the material world. The pursuance of greed is leading to destruction. They want human beings to live happily.

References:

[1] National Environment Engineering Research Institute report of Ganga, 2018.

[2] http://www.ibaradio.org/India/ganga/radio/radio4/sd1.htm

THE STATE OF THE GANGA

he river Bhagirathi originates from glaciers in Uttarakhand at Gaumukh at an elevation of 4,100m. The river Alaknanda originates not very far away from Bhagirathi at an elevation of 3,123m. The two meet at Devprayag and become Ganga. The Ganga traverses a total distance of 2,510 km from Gaumukh before it joins the Bay of Bengal at Ganga Sagar. During its course it is joined by tributaries like Bhilangana, Alaknanda, Ramganga, Kali, Yamuna, Gomti, Ghagra, Gandak, Kosi and Sone. The Ganga was declared as the national river of India in 2008.

WATER QUALITY

A 2018 National Environment Engineering Research Institute, Nagpur report reveals that the water quality remains below the Bureau of Indian Standards' drinking water standards for chemical parameters at most locations in the Ganga and that the water quality degrades along the river. The extent of organic loading is indicated by Biochemical Oxygen Demand (BOD). High BOD will imply low Dissolved Oxygen (DO) which is not good for aquatic life. 70% of the pollution of the Ganga is because of sewer and industrial waste and the rest is from agriculture. The major polluting industries along the Ganga are paper and pulp, sugar and distillery, tannery and textiles.

HYDROELECTRIC PROJECTS

The hydroelectric power projects in the upper reaches of the Ganga (see Appendix III) have significantly affected its flow. For some stretches the river has been diverted to flow through tunnels and at other places it has been impounded. Out of the total length of 294 km of the Upper Ganga from Gaumukh to Haridwar, only for about 80 km — from Gaumukh to downstream of Jhala — does it flows in its pristine form. About 82 km of the Upper Ganga has been converted into impoundments or made to flow through tunnels.

Had the government not released water from the Tehri, Haridwar, Bijnor and Narora dams, by submerging more people before they could be rehabilitated, there would not have been enough water in Allahabad — now renamed Prayagraj — for people to take a dip in the Ganga during the Ardh Kumbh in early 2019.

Prof. G.D. Agrawal's main demand was to stall hydroelectric projects which were an obstacle in the free flow of the Ganga. He had fasted earlier in 2008 for letting the Bhagirathi flow uninterrupted between Gangotri and Uttarkashi in a stretch of about 135 kms. Because of this fast the Manmohan Singh government cancelled the yet to be started 380 MW Bhairon Ghati and the 480 MW Pala-Maneri hydel power projects. In 2009 when he got the feeling that government was not serious about its commitment he started a fast again and this time got the 600 MW Loharinag Pala hydel power project cancelled even though the government had spent close to Rs. 1,000 crores on it.

It is for two reasons that hydroelectric projects in the Himalayas are undesirable. It has been seen that maximum damage was caused at the sites of hydroelectric project in the floods of 2013. Moreover, dams and barrages on the Ganga, obstructing the flow of the river take away the unique bactericidal properties of flowing Ganga water which is present in its sediments. In 1965 the Calcutta Port Trust reported 8.92 milligram per liter of sediments near the Sundarbans while in 2016-17 the department of forest reports it to be 5.52 mg/lin high tide and only 4.68 mg/lin low tide, according to scholar Supratim Karmakar from West Bengal.

A number of researches and expert committees have opined that modern development of the kind which seeks to build hydroelectric projects is an invitation to disaster and should not be pursued. The Ravi Chopra Expert Committee constituted in compliance with the Supreme Court judgment dated 13/8/2013 after the June Kedarnath disaster that year, concluded

that, 'Existing and under-construction hydro power projects have caused significant irreversible damage to the Himalayan Ecology and they significantly aggravated the damages due to floods of June 2013'. It recommended that 23 proposed hydropower projects be scrapped and ecological sensitive zones be created in all the river valleys in Ganga-Himalayas.

Affidavit of the Ministry of Environment, Forest and Climate Change in Supreme Court on 5/12/2014 stated, "...with the construction of hydropower projects the local ecology is constantly overburdened. There are clear citing of irreversible damages of environment, in terms of loss of forests, degraded water quality, geological, social impacts and they enhance landslides and other disasters..... It was commonly observed that all hydroelectric projects (existing and under-construction) in the disaster affected areas have been significantly impacted and the maximum damage sites, in the disaster affected areas, were located either just upstream, or around or immediate downstream of these hydroelectric projects. It is pertinent to conclude that there has been a direct or an indirect impact of the hydroelectric projects in the aggravation of floods of 2013".

However, the governments have been surreptitiously promoting the dams and their builders and have ignored the sane opinion which resonated in the voice of Prof. G.D. Agrawal. The manner in which the decisions about going ahead with hydroelectric projects are taken can be gauged from the fact that three expert members

Ravi Chopra, Rajendra Singh and Rashid Siddiqui quit the National River Ganga Basin Authority in 2015, as without holding the meetings of the authority or the knowledge of its members, projects were being pushed through. One of the stated reasons for the resignation was the government's disregard for the indefinite fast undertaken by Prof. G.D. Agrawal at that time.

The 2018 NEERI, Nagpur, report concludes that, "... withdrawal of water from network of dams, barrages, canals, etc, are as detrimental as discharge of sewage/industrial wastewater and therefore need to be regulated considering minimum environmental flow". The Indian Institutes of Technology Consortium report recommends that all existing hydroelectric projects may be redesigned and operated based on requirements of environmental flows.

SEWAGE TREATMENT PLANTS

The capacity of Common Effluent Treatment Plants and Sewage Treatment Plants to clean industrial waste and sewage produced by cities, respectively, is simply not enough to handle all the waste generated and whatever capacity has been built is not always functional.

On 20th August, 2018 Uttarakhand High Court ordered the state government that no untreated sewage should be dumped in the Ganga. As against the installed capacity of 45 million litres per day of STPs in Haridwar, about double the amount flows into the Ganga untreated. Prof. Agrawal questioned what the Pollution Control Board and National Green Tribunal were doing till then? He also raised a question about how these sewage flows were measured. He opined, "Most likely, it is not the maximum flow. It is the flow on the particular day when it was measured. Sometimes the flow estimate may be derived as multiplication of population with an assumption of 50 litres per person per day sewage generated".

Against the 400 million litres per day of sewage generated in Varanasi city, the built capacity of STPs is only one-fourth. Bhagwanpur plant, near Banares Hindu University, has a capacity of 8 MLD, Deenapur plant has a capacity of 80 MLD and Konia plant has a capacity of 150-200 MLD but works at only 30-40% of its capacity. Among these the Bhagwanpur plant works best but its capacity is minuscule compared to the total sewage generated. Two more STPs are now under construction. When the plants are out of order or there is no electricity, the waste flows directly into the river untreated.

As an example of bad planning Prof. Agrawal pointed out the pumping station at Assi river in Varanasi which pumps the sewage upstream to a 35 MLD capacity STP in Ramana. He asked innocently, "What is the logic of pumping sewage upstream of river?". He also narrated the incident of when the environment minister in the United Progressive Alliance government, Saifuddin Soz, visited the Rajendra Prasad Ghat sewage pumping station in Varanasi only to be told that it had not been functioning for the last month and a half.

Assi river, which looks more like a drain — and parts of it have been completely covered to actually make

it a drain — discharges 80 MLD of untreated sewage and Varuna river with 80-90 MLD of sewage discharges 75-80% of it untreated into the Ganga. Parts of Assi and Varuna, two rivers from which the city derives its name, are also used by the Nagar Nigam as landfills. Seepage from these garbage heaps also pollutes the rivers.

Kanpur city produces 600 MLD of sewage and industrial waste whereas the built capacity to treat waste is hardly 200-250 MLD. Nitin Gandkari in his letter requesting Prof. Agrawal to end his fast had mentioned that in Kanpur 80 MLD sewage out of 140 MLD flowing through Seesamau drain is now being diverted to Bingawan STP (See Appendix IV). Swami Sanand had questioned, "Why was an STP capacity of only 80 MLD created? When the city was expanding higher STP capacity should have been planned. But the approach of the government is to build whatever capacity can be created from the available funds. The nature of planning is adhoc."

Corruption also has a role to play in this pollution. Employees of Municipal Corporations or State Pollution Control Boards, responsible for looking after the CETPs, allow the industrial waste to directly flow into the river bypassing the treatment plants by accepting bribes. When the manufacturing units increase their production capacity they don't inform the PCBs officially. The extra waste generated is also allowed to join the river in exchange for bribes.

With such callous attitude Prof. Agrawal was not sure how Ganga could be made clean. He felt that the commitment as well as competence to even operate the STPs is missing. According to him North India has no good consultants in this area. Only the contractors benefit from the construction of STPs and CETPs. The government's motivation to clean the Ganga is lacking and therefore Prof. Agrawal had to sit on a fast unto death to demand a law for the conservation of the river.

The 285 projects undertaken by the National Mission for Clean Ganga, the implementation arm of the National Council for Rejuvenation, Protection and Management of River Ganga (also called National Ganga Council) under the chairmanship of the PM, as part of 'Namami Gange' are mostly related to sewage treatment plant construction and riverfront development, and have nothing to do with conservation.

The Namami Gange programme aims at the abatement of polluting activities in the river through interception, diversion and treatment of the waste water flowing into it through drains. However, the capacity of the Sewage Treatment Plants is woefully short of the volume of sewage being generated and we are nowhere near being able to completely treat the whole sewage. Rs. 11,176.81 crore, which is more than half the budget of Namami Gange, has been earmarked for creating a capacity to treat 1,178.75 million litres per day of sewage but NMCG, responsible for implementation of Namami Gange, estimates total sewage generation to be 2,900 MLD. In all likelihood by the time NMCG meets its

target of sewage treatment the volume of sewage generated would have gone up several times.

It almost appears to be a hopeless task. The only hope is to let the river clean itself but that will require letting the river flow naturally, a demand for which Prof. G.D. Agrawal fasted and died and something with which the government doesn't agree. There is clear conflict between the development agenda of governments and the demand of environmentalists and saints determined to put their lives at stake for the Ganga.

The Ganga and other rivers are shown to possess bacteriophages which have an ability to kill pathogens and hence have a certain self-cleaning property. Prof. G.D. Agrawal believed that these bacteriophages flow with the sediment and therefore it was important that the river flow uninterrupted. Prof. Agrawal was also of the view that sewage should not flow into water bodies, untreated or treated, and must find an alternative disposal.

UNSAFE FAECAL COLIFORM LEVELS

According to data of pollution control boards of five states along the Ganga basin, the faecal coliform levels ranged from 2,500 to 2,40,000 per 100ml in various places along the Ganga whereas the safe level is 2,500 per 100 ml. At Dev Prayag, the confluence of Bhagirathi and Alaknanda, the faecal coliform numbers is 100 times more than levels acceptable for bathing. At Kanpur it is 1000 times more than acceptable levels.

CHAR DHAM PROJECT

The Uttarakhand government has taken a decision to construct a road though the Jim Corbett National Park posing a threat to the forest and wildlife. The government has also undertaken an ambitious all weather Char Dham road project connecting Kedarnath, Badrinath, Gangotri and Yamunotri at an estimated cost of Rs. 12,000 crores.

Prof. Agrawal thought that this was a disastrous project as it would involve cutting a large number of trees, creating instability by clearing hilly slopes, muck from which will flow down into the rivers. He expressed astonishment that Nitin Gadkari could hold both ministries of Road Transport, Highways and Shipping and Water Resources, River Development and Ganga Rejuvenation at the same time in the first Narendra Modi government. It required the ingenuity of Prof. G.D. Agrawal to see this contradiction.

Similarly he pointed out that among the achievements of the Forest department will be counted the approving of projects which involve the clearing of forests! Are the government and its various departments meant to save the environment or destroy it just so that some private interests make unethical profit from it? The nexus of Government-Corporations-Contractors is clearly the biggest threat to the environment.

OTHER POLLUTING ACTIVITIES

Prof. G.D. Agrawal was also quite critical of activities like Kawanriya yatras and Ram Kathas in the name of religion and culture which create more pollution. He gave the example of how people treat Kanwariyas with Chole-Bhature and other eatables from road side stalls and waste including plastic is thrown around. Morari Bapu delivered a Ram Katha at Gangotri Dham, Uttarkashi from 18 to 26 August, 2018. Prof. G.D. Agrawal questioned the wisdom of conducting Ram Katha at this location which would have put an additional burden on the local ecology.

FUNDS GOING DOWN THE DRAIN

The Ganga couldn't be cleaned after Rs. 1,700 crores were spent as part of the Ganga Action Plan. The present government has proposed a budget of Rs. 23,323 crore for the Namami Gange project, of which Rs. 7,000 crore have already been spent. Prof. G.D. Agrawal predicted that the Ganga would not be cleaned because the present government is following a similar programme as the past governments. He believed that similar to crores of rupees having gone down the drain in Ganga Action Plan now many more crores will be splurged in the name of Ganga River Basin Authority (renamed as National Council for Rejuvenation, Protection and Management of River Ganga) and Clean Ganga Mission by 2020. After Narendra Modi became the Prime Minister the 'Namami Gange' project was launched with huge fanfare only to yield no results on ground.

WHAT NEEDS TO BE DONE

The NEERI report concludes that even though the Ganga has its own way to survive despite unabated disposal of waste yet major interventions like maintaining environmental flows, building Sewage Treatment Plants and Individual Household Latrines, bringing about restrictions on cremation activities, disposal of dumps, immersion of idols, garlands and flowers are required so that we don't burden the river too much. Specifically, the following steps would be required:

- 1. Impounding of water artificially affects the Dissolved Oxygen downstream. Hence, minimum environmental flow must be maintained in the river at all places to minimize impact on water quality. This environmental flow must ensure minimum sediment transport and flow as water and sediment interaction plays an important role in multiplication of bacteriophages.
- 2. Discharge of untreated sewage in the Ganga requires the implementation of decentralized sewage treatment plants at every village, town and city level and treated sewage should be used for some non-potable purpose. Prof. Agrawal was very clear that sewage – untreated or treated – must not flow into the river.
- 3. Chemical contamination of the river from industries with metals like chromium and lead must be prevented by implementing stringent measures like Zero Liquid Discharge from the Combined Effluent Treatment Plants. Such industries should be moved out of the catchment area of the river.

- 4. Organic farming must be practiced in the catchment area of the river and if possible even beyond that.
- 5. STPs cannot remove emerging contaminants such as Diclofenac, Primidone, Testosterone and Progesterone in wastewater from hospitals, pharmaceutical and cosmetic industries which will require other measures to ensure that they are not disposed into the river.
- 6. Ecosystem based approaches to stabilize riparian zones will require both civil engineering and biological interventions including active community participation of people living near river banks. Medicinal herbs growing in the upper reaches of the river between Gomukh and Gangotri and adjoining areas must be protected as these plants impart some of the self-cleaning properties to the Ganga.
- 7. Disposal of ritualistic material into the river must be prevented.
- 8. Riparian vegetation needs to be protected.
- Health of the river needs to be protected by conserving buffers and reducing pressures for about 1000 meters (as suggested by Prof. Agrawal) on both sides of the flowing river.
- Disposal of partially burnt/un-burnt human corpses and animal carcasses in the river should be prevented.

- Construction of new permanent structures in river flood plains for residential, commercial and industrial purposes should be prevented.
- 12. Development of riverfronts to promote recreational, commercial and tourism related activities should be avoided as this will create unnecessary burden on the river. The Sabarmati Riverfront, which displaced thousands living in slums along the river, now seems to have become a model for other places. The irony is that if water from the Narmada canal was not channelled into the Sabarmati the residents and tourists in Ahmedabad would see no water along the stretch of the city. There is no water upstream and the downstream is heavily polluted with industrial waste and sewage flowing into the river, mostly untreated.

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GANGA AND THE POLITICS OF HINDUTVA

It is inexplicable why the Bhartiya Janata Party which came to power on the agenda of Hindutva and whose Prime Ministerial candidate declared that he got a call from mother Ganga before contesting election from Varanasi in 2014 for the first time, and Rashtriya Swayamsewak Sangh, which doesn't leave any opportunity to exploit people's religious sentiments, do not support the saints when they fast for saving the Ganga.

After Narendra Modi took over as Prime Minister, the name of the Water Resources ministry was changed to include 'Ganga Rejuvenation' in it, as if it was the only water resource or river in such a big country. The high profile Namami Gange project aimed at cleaning the Ganga was put in place which seems to have achieved little. The Ganga has become more polluted as much water has flown through it since Narendra Modi won his election from Varanasi in 2014. The name of the Ganga has now been dropped from the Ministry and we also do not hear about Ganga so much in the second term of the BJP government headed by Narendra Modi. His only publicised visit related to Ganga has been to Kanpur, not to Varanasi this time.

Narendra Modi famously declared in his 2014 election campaign that he would clean the Ganga the same way he had cleaned Sabarmati river in Gujarat. Now the reality of the Sabarmati is that there is no water in the upstream of the river from Ahmedabad city. In the portion of the river which passes through the city for about 11 km one can see water diverted from a Narmada canal, which was not originally meant for this purpose. Downstream from the city all the industrial and urban waste flows into the river.

None of the CETPs built in Ahmedabad are properly functional, which is the reason for the extremely polluted water of the Sabarmati river downstream of the city. If this is how Narendra Modi had claimed he would clean Ganga, then the obvious question was which river he would use to draw water from for the Ganga because the Ganga is the biggest river in its region, unlike Sabarmati. But this is exactly what was done to produce water at Ardh Kumbh in early 2019. Water was taken from the upper reaches of the Ganga, brought through canals and put in the Ganga at Prayagraj like the Nar-

mada canal water was put in the Sabarmati. But both methods are temporary quick-fix solutions, which appears to have become the functional characteristic of this government.

Truth is that if water was not released from the dams at Tehri, Haridwar, Bijnore and Narora, there would not have been sufficient water at Prayagraj to take a holy dip in. The water of the Ganga was cleaned between 15th January and 4th March, 2019, the period of the Ardha Kumbh, artificially but without its aquatic biodiversity, which implies that it was an adhoc arrangement. The question is, when the government is willing to do something to gain political mileage, why doesn't it implement a permanent solution in the interest of the people and the Ganga? Scientists like Prof. G.D. Agrawal believed that Ganga will not be clean unless a minimum volume of flow is ensured in the river throughout the year.

It was shocking that the government did not take Swami Sanand's fast seriously and neither did the media, most likely at the behest of the government. Is this the famed Indian culture which Rashtriya Swayamsewak Sangh boasts of, that just as the Narendra Modi-Amit Shah duo has marginalised senior leaders of the BJP, they also ignored Swami Sanand's fast and made it clear that they will not have any qualms if he dies? Could the government, so worried about saving cows' lives or worried about the status of Kasmiri Pandits, not have given priority to saving a Sadhu's life? Acquaintances of Swami Sanand were appalled at the

way he had been left to die. If there was any sensitivity in the government it would have entered into dialogue with Swami Sanand to end his fast and agreed to make a law for the conservation of not just Ganga but all water bodies of the entire country.

After all, Rajiv Ranjan Mishra, Director General of NMCG, did end Brahmachari Atmabodhanand's fast on 4th May, 2019, after 194 days, who sat in a sequel to Prof. G.D. Agrawala's fast, days before the election on 19th May in Varanasi from where Narendra Modi was seeking re-election. The government probably did not want another death of a sadhu on the issue of Ganga in less than a year.

Prof. Agrawal had forewarned the government about his fast by writing to the PM twice and then again wrote to him twice during the fast (see Appendix V). The PM, otherwise known to open his mind regularly in public broadcasts known as 'Mann ki Baat,' chose not to respond, until after Prof. Agrawal's death when he tweeted a condolence message (see the same Appendix). The PM has similarly maintained silence on critical issues like violence against Muslims, Dalits, intellectuals and the MeToo campaign.

Whether it was a slightly high dose of Potassium at the All Indian Institute of Medical Sciences at Rishikesh which ultimately caused cardiac arrest or deliberate neglect by the government over 112 days of fast-untodeath to demand a law for conservation of the Ganga by Prof. G. D. Agrawal, the central government and especially the Prime Minister will be held responsible for his death. In his second and fourth letter to the PM, Prof. Agarwal had said he would consider it a murder if he were to die and would hold Narendra Modi responsible for it (see Appendix V). Matri Sadan, the ashram in Haridwar where Prof. Agrawal fasted, has accused the government of murder by giving him an extra dose of potassium.

A 2011 case of murder by poisoning of Swami Nigmanand, a young hermit also associated with Matri Sadan, who fasted for 115 days against illegal sand mining in Ganga, is pending in the court. A mining mafia associated with RSS, Gyanesh Agarwal, is alleged to be behind the murder of Swami Nigmanand.

Governments play the trick of making an accused out of a victim to politically cover-up, and it has become more of a wont under Narendra Modi's BJP government. Some unknown person has been accused by the authorities of not letting Prof. G.D. Agrawal give up his fast.

Those who know Prof. Agrawal well are aware of his steely resolve. He would tell his well wishers during the marathon fast, "Worry about Ganga, not about me". He had chosen to begin his fast on Ganga Dussehra, giving up water on the first day of Navratra and predicted his demise before Vijayadashmi. As a true scientist he even planned his death meticulously.

The government by accusing Prof. Agrawal of continuing his fast under duress wanted to divert attention from the main demands that he was making of the government: to enact a law for the conservation of the Ganga, to halt all hydroelectric projects on it, to ban mining and deforestation activities in its vicinity and to form a council consisting of people sensitive to the Ganga to oversee its interests.

It was too embarrassing for the government, whose PM had committed to clean the Ganga by 2019 and then revised the deadline to 2020, and which had already spent 30% of the sanctioned Rs. 23,323 crores budget for the purpose, to admit that the health of the Ganga had worsened instead of improving during its regime because of which Prof. Agrawal was forced to go on a fast.

Some people also believe that ashrams were scrambling to take the credit for Prof. G.D. Agrawal's sacrifice and wanted him to choose their site to carry out his fast-unto-death. However, the reality is that when Prof. Agrawal wrote to various ashrams to request them to allow him to sit on fast at their location, Matri Sadan was the only one which responded positively. Before moving to Matri Sadan, Professor G.D. Agrawal was spending time at Vanvasi Sewa Ashram in Sonebhadra, U.P.

With the politics of vendetta which the BJP indulges in, nobody wanted to be on the wrong side of the government. Matri Sadan with a history of confrontation, as can be seen by their sixty-one fasts conducted so far, have absolutely no fear of authority and unfortunately there are not many such places left in the country. Even for an ordinary meeting on any social-political issue organizations are required to take permission of the authorities and if it is something controversial like Kashmir, the permission is often denied. Academic institutions do not give permission for holding meetings which can be critical of the politics of BJP/RSS. Much before the delivery of Supreme Court judgement on Ramjanambhumi-Babri Masjid case, on 17th August, 2019 the author was not allowed entry into Ayodhya with Professor Ram Puniyani to hold a two day communal harmony workshop at a Ram Janaki temple there.

Whereas the horrific protests against the Supreme Court order allowing entry of women of all ages into the Sabarimala temple in Kerala received the RSS chief's stamp of approval, the eerie silence of the cadres of Hindutva organisations — with proclivity for various degrees of militancy and who leave no opportunity of exploiting people's religious sentiments — on the issue of protecting the Ganga raised by Prof. Agrawal exposes the true nature of these right-wing organisations.

It is clear that the politics of polarisation takes precedence over religious-cultural-nationalism issues. RSS has various weapons in its arsenal. This time it chose the ostracism of Prof. Agrawal on a mass scale and hence it was like a mob lynching done through stoic silence and managing the media so that Prof. Agrawal's fast wasn't highlighted. Compare the mass hysteria created by Anna Hazare's short fasts a few years ago, which the RSS played a role in strengthening, to the conspicuously absent response from anywhere in the country to Prof. Agrawal's long fast. Was Prof. Agrawal raising an

issue less important than corruption? Corruption can probably be fixed more easily than the damage to the environment being caused by our developmental policies.

The retrogressive stand on Sabarimala temple entry by RSS-BJP is shameful as is their insensitivity towards the progressive issue of Ganga rejuvenation. Even though the RSS chief and others associated with his ideology often vehemently claim that it is always Hindus who face persecution, the BJP should answer why Muslim women were chosen to be granted 'equality' through a law which jails husbands on the civil matrimonial issue of triple talaq, while denying equality to Hindu women who laid claim to their fundamental right to visit the Sabarimala temple?

Prof. G.D. Agrawal was an extraordinary scholar not just in the modern sense of knowledge but also in the traditional sense of wisdom. On top of this he was a saint, in the true sense, not the kind whose sectarian outlook exacerbates religious polarisation in society, resulting in strife. In fact, Prof. Agrawal was against the exhibitionist tendencies of religion. The death of such a saintly figure is going to cost the government dear. The saints of Matri Sadan have decided to carry on the struggle of Prof. Agrawal.

When soldiers are martyred there is a widespread emotional outburst throughout the country. People come out on the streets, offer help to families of deceased soldiers or erect their statues. The government has little control over the fate of soldiers. However, it could have prevented the martyrdom of Prof. Agrawal and others who laid down their lives.

Why is the Narendra Modi government not willing to dialogue with these saints? Even the common people seem to be insensitive towards these saints. Especially when the idea of nationalism is being given a religious colour. People take a public stand on the issue of the construction of Ram temple in Ayodhya and for preventing the entry of women in Sabrimala temple of Kerala, which includes the two national parties BJP and Congress, but do not sympathise with saints who put their lives on stake for the Ganga.

As the number of saints dying while fasting for the sake of Ganga keeps going up and the resolve of more of them to embark on the same path becomes stronger, it may be difficult for the country and its government to ignore this phenomenon. The BJP, now busy extracting political mileage out of the SC judgement in favour of the Ram temple in Ayodhya, can ignore the issue of Ganga at its own peril.

If the government would have been sincere about cleaning Ganga at least 43% of people in the country would have directly benefitted whereas nobody's life is in danger if the proposed grand temple in Ayodhya got delayed. In Sabrimala the BJP is taking society backwards by obstructing the entry of women of child-bearing age, going against the Supreme Court decision. Yet the RSS-BJP combine maintained silence on the issue

of fasting saints. This demonstrates that the politics of Hindutva is not interested in religious issues unless there is a potential for polarisation of votes in its favour. Hence for RSS-BJP, it is not the people but merely political power that matters. It would have been better if the RSS-BJP combine had given preference to an issue which benefits people rather than promoting a retrogressive agenda.

The boatfolk community, Nishad or Mallah, in Varanasi has been protesting against the introduction of a cruise owned by a private company to ferry passengers. At stake is a population of about forty thousand whose livelihood depends on the three thousand boats in the Ganga at Varanasi. While the licences of the boatfolk have not been renewed by the Municipal Commissioner, the cruise has obtained permission from the Tourism department of the Government of India.

The leader of the community Vinod Sahni is in jail on false charges since May 2018 as he was opposing the traditional exploitation of boatfolk at the hands of middlemen as well as the new projects being launched by the BJP government which are a threat to the livelihood of the boatfolk. The Nishad community is also demanding the traditional agricultural rights over land across the river from Varanasi city which is now in danger of being encroached on by vested interests. People living all along the Ganga whose livelihood depends on it face a similarly bleak future.

The BJP's hypocrisy related to the Ganga stands exposed now. It is apparent that saints fasting for the Ganga or the boatfolk of Varanasi matter little for it compared to the vested interests of private corporations who gain from the commercialization of the Ganga. If it has to choose between its core agenda of Hindutva and profits for corporations, it has made its preference clear.

79-year-old Swami Agnivesh was thrashed and abused in Jharkhand by members of the Bhartiya Janata Yuva Morcha and Akhil Bhartiya Vidyarthi Parishad. Swami Agnivesh is a follower of Arya Samaj sect which was founded by Swami Dayanand Saraswati based on the teachings of the four Vedas. The ten principles laid down by him as the philosophical basis of Arya Samaj ideology include accepting the truth and rejecting the untruth, taking a decision about every action based on Dharma after giving due thought to right and wrong, making the physical, spiritual and social well-being of all people our objective, basing our conduct on love, righteousness and justice, and encouraging knowledge and dispelling ignorance.

Swami Agnivesh has fought against injustice all his life. From liberating bonded labourers, taking out a 18 day padyatra from Delhi to Deorala against the Sati tradition, participating in the movement for the entry of Dalits in Nathdwara temple near Udaipur, campaigning against female foeticide, participating in the movement for a ban on liquor, to conducting constructive

programmes like multi-faith harmony meetings and world parliaments. He has been an activist all his life.

He has not only lived according to the principles of the Hindu reformist movement of Arya Samaj but also served the higher goals of humanity. Swami Agnivesh is an ideal example of what a Hindu monk should be like. He is well respected within the country as well as abroad. He has been recognized by the United Nations as well when he was made the chairperson of the UN Trust Fund on Contemporary Forms of Slavery. Through him Hinduism has been projected in a good light, which is also because he has practiced Gandhian principles in his life. He has authored a book called Vedic Samajvad.

If we think about it, what have the Hindutva organisations, which project themselves as the sole torch bearers of Hinduism, got to do with either the principles or the spirit of the Hindu religion? In some ways, for example by giving a free hand to lumpen element, they are actually tarnishing the image of the Hindu religion.

Swami Sanand and Agnivesh both put on saffron robes, were/are willing to take any risk for truth but were/are committed to the path of non-violence, were/are celibates, vegetarians and scholarly. Both gave up comfortable lives. While Prof. G.D. Agarwal quit his government job, Swami Agnivesh relinquished his Haryana assembly membership and ministership. Both had/have complete faith in Hinduism which guided/guides their lives and actions. Swami Nigmanand sacrificed his life

at a very young age. His faith in Hinduism is above question too.

The question then is why do the Hindutva organisations RSS and BJP not like monks such as these? Why is it that Hindutva organisations either completely ignore such monks or feel threatened by them to the extent that they have to engineer attacks on them? Swami Nigmanand lost his life because the Hindutva forces were dominated by commercial interests with criminal intentions.

It is because people like Swami Nigmanand, Sanand and Agnivesh were/are truly dedicated Hindus. They don't put up a show merely to use religion for political or commercial purposes. Is it not an irony that RSS and Hindutva organisations consider people living the ideals of Hinduism most truthfully as opposed to them?

Swami Agnivesh and Sanand doesn't/didn't hate Muslims, neither are/were they afraid of them. They don't/didn't make provocative speeches which can trigger communal violence. They want/wanted to promote communal harmony and peace in society not hatred, discrimination and violence. They don't/didn't identify human beings according to their caste, religion or class. For them humanity is/was supreme. They behave/behaved courteously even with their adversaries.

Now the wider Hindu society has to decide whether people like Swami Nigmanand, Sanand and Agnivesh are the real representatives of Hindusim or people who take the law into their hands and are involved in the mob lynching of Muslims and Hindtuva organisations like the RSS and BJP which provide patronage to them and their top leaders?

Also, the difference between Hindutva and Hinduism has emerged more clearly because of this. Whereas people believing in Hindutva ideology are not averse to taking the lives of others, for example in communal riots, lynching in the name of the protection of cows, assassination of intellectuals, etc., saints who truly believe in the philosophy of Hinduism will stake their own lives instead.

Moreover, the saints willing to give up their lives are in favour of the uninterrupted flow of rivers whereas those who condone deaths in the name of the politics of Hindutva are interested in damming rivers and stopping rivers going to Pakistan, not realising the consequences, either of their politics or of tampering with rivers. This may explain the indifference of RSS-BJP towards saints who go on fasts.

However, this could spell trouble for BJP. Tulsidas in Ramcharitmanas has said that if saints are unhappy in a regime then the king may burn even without fire.

मुनितापसजिनते दु:खलहहीं,तेनरेसबिनुपावकदहहीं

muni tāpas jinte duḥkh lahahīm / te nares binu pāvak dahahīm

THE TRADITION OF SAINTS MAKING SACRIFICES FOR THE GANGA

atri Sadan, on the bank of river Ganga, is no ordinary Ashram in Haridwar. Swami Shivanand Saraswati, head priest of the Ashram, his disciples including Swamis Nigmanand, Dayanand, Yajnanand, Purnanand and Brahmachari Aatmabodhanand, are not ordinary sadhus either. They have observed long fasts to prevent illegal mining in Ganga in Haridwar for over two decades now.

Overall sixty-one fasts (see Appendix II) have been organized so far and the Ashram has lost three sadhus. It is almost an everyday battle confronting the mafia, administration, police, politicians, courts and the media, all of them aligned against the ashram.

It is an inspiring story of a bunch of saints who have made it their life's mission to fight against the nexus of the corrupt and the mafia. They consider it as their religious duty. Also, they think it is a struggle for their right to be able to practice their rituals in a peaceful atmosphere, not disturbed by noise and pollution and also a right to be able to take a dip in the holy Ganga.

Their commitment is so deep that nothing can divert them from their path of righteousness. Truth and celibacy are their only weapons.

The sixty-first fast has been undertaken, for the first time in the history of the ashram by a lady saint, Sadhvi Padmawati, for demanding *Aviral* and *Nirmal* Ganga, for which Prof. Agrawal gave up his life.

Swami Shivanand Saraswati, originally from the Mithila region in Bihar, did his M.Sc. at Jadhavpur Univeristy and was a teacher of Chemistry at a higher secondary school in Kolkata before coming to Uttarakhand. As soon as he set up Matri Sadan in 1997 he noticed crushers and trucks active in the Ganga, mining and taking away sand and stones. He realized stones and sand were necessary for the water as well as other beings likes fishes, turtles, etc.

When he raised the issue for the first time in 1998 he was labelled by the media as a charlatan. He was even

offered a bribe by the mafia – Rs. 10,000 per truck and Rs. 35,000 per crusher per day, in the beginning itself. The extent of corruption can be gauged from these amounts. The collusion of the administration and government was apparent. What was shocking was that even courts were accomplice.

Going through the reasons for the sixty fasts conducted by Matri Sadan one wonders how many times does one have to ask the same authorities to ban mining? Sixty-one fasts tell a story of repeated breach of promise by authorities to ban mining. It is a surprise that, in spite of the frustrating experience, the ashram has not given up yet.

Once Swami Shivanand was poisoned in jail. Arsenic was injected into the lemon which he was using. This was confirmed when a well-wisher took his hair and nail for examination to France. There was another attempt to eliminate him in which Rs. 20 crore were arranged by mafioso Chinu Pandit for this purpose. Rs. 8 crore were to be paid to the assassin, Rs. 2 crore to the media and the remaining Rs. 10 crore were to be distributed among police-administrative officials. The Inspector of the Local Intelligence Unit came to know of this and informed the District Magistrare Senthil Pandian and the Superintendent of Police Sadanand Dube. The officials busted the devious plan.

Swami Shivanand has also got 108 acres of forest land which was illegally transferred to private owners, returned to the government, even though the matter is still in the court. The Kumbh area was shown to be smaller on paper in order to allow mining in the remaining area. The Ashram protested against this and saints went on fast and finally got the area restored.

Swami Nigmanand Saraswati, also from Bihar, left his home at an early age, unable to bear the corruption around him, and became a disciple of Swami Shivanand. He was probably the most brilliant of Swami Shivanand's disciples and was the brain behind the movement against illegal mining carried out by Matri Sadan until his death.

When he went to speak at a public meeting in Haridwar on 13 December, 2010, on behalf of Swami Shivanand and eloquently started exposing the nexus of the mafia, administration and politicians behind illegal mining, the microphone was snatched from his hand and he was not allowed to continue.

In his last fast Swami Nigmanand Saraswati offered himself for sacrifice by getting the fast of Brahmachari Yajnanand terminated. On the 68th day of his fast, 27 April 2011, the administration admitted him to the district hospital on the pretext of conducting a medical check up. He was given glucose through the veins and then a liquid diet by a pipe through the nose on 28 April because of which he became healthier.

However, on 30 April an unidentified lady dressed up as a nurse injected poison into his body because of which his health started deteriorating and ultimately he succumbed to death on 13 June, giving up his life fighting against judicial corruption and for the protection of the Ganga and the environment.

Swami Nigmanand died on the 115th day of his fast in 2011. He was poisoned with organophosphate while in the district hospital in Haridwar during the regime of the BJP government of Ramesh Pokhariyal Nishank in Uttarakhand, allegedly at the behest of a mining mafioso Gyanesh Agarwal associated with the RSS. Otherwise, there is no explanation for why nobody on behalf of the government went to dialogue with him during the course of his long fast.

Swami Shivanand thinks that it was divine intervention that Baba Ramdev got admitted to the same hospital in Jolly Grant (after he fled Ramlila Maidan in New Delhi subsequent to a police crackdown during the anticorruption movement) to which Swami Nigmanand was transferred from Haridwar. Apparently Swami Nigmanand was repeatedly poisoned here. Because of the national media presence at the hospital to cover Baba Ramdev, the death of Swami Nigmanand on 13 June got highlighted. It is then that the world came to know about a saint who sacrificed his life fighting against the mining mafia.

The CBI filed a closure report in collusion with the mafia. Matri Sadan has moved the court against this, where the matter is pending.

Swami Nigmanand's body was cremated in the ashram on 16 June, 2011. He was declared 'Gangaputra' by the

local media after his case was highlighted by the national media.

The brilliance and purity of saints associated with Matri Sadan is reflected in the letter written by Swami Nigmanand to Chief Justices of Supreme Court and High Court of Uttarakhand (see Appendix VI). The letter has been edited to make it more readable.

Swami Gokulanand who fasted with Swami Nigamanand from 4 to 16 March 1998, a year after Matri Sadan was established, is also believed to have been murdered by the mining mafia in 2003 when he was living in anonymity at Bamaneshwar temple in Nainital.

Baba Nagnath died at Manikarnika Ghat in Varanasi in 2014 fasting for the same demand as Professor Agrawal, to let the Ganga flow uninhibited and unpolluted, Aviral and Nirmal, respectively.

86 years old Swami Gyan Swaroop Sanand, earlier known as Professor Guru Das Agrawal at Indian Institute of Technology, Kanpur and who served as the founding member-Secretary of Central Pollution Control Board, sat on an indefinite fast at Matri Sadan, Haridwar on 22 June, 2018 to demand a law for the conservation of the river Ganga and died on 11th October, on the 112th day of his sixth fast.

Swami Sanand went on fast from 13 to 30 June, 2008, 14 January to 20 February, 2009 and 20 July to 23 August, 2010 against three hydroelectric projects Bhairon Ghati, Lohari Nagpala and Pala Maneri. He was able to

stall them all even though the tunnel in Lohari Nagpala was complete and got the government to declare 135 kilometres of Bhagirathi as an eco-sensitive zone.

His fourth fast was from 14 January to 16 April, 2012 in stages - on fruits in Allahabad, lemon water in Haridwar, without water in Varanasi after which he had to be admitted to All India Institute of Medical Sciences, Delhi. In 2013 he fasted from 13 June to 13 October, in which he spent 15 days in jail. The president of the Ganga Mahasabha, Jitendranand, delivered a letter to him from the then BJP President Rajnath Singh committing that when the Narendra Modi government came to power it will accept all demands of Swami Sanand related to the Ganga.

However, the Modi government was a big let down. Swami Sanand felt the Manmohan Singh-Jairam Ramesh-Jayanthi Natarajan team was more sensitive than Narendra Modi-Nitin Gadkari-Uma Bharti towards concerns about the Ganga. He had special praise for Jairam Ramesh who got the making of Ganga Master Plan by foreign experts with United States funds cancelled. On Pranab Mukherjee's suggestion this task was given to the Indian Institute of Technology Consortium.

Swami Sanand wrote a letter to Nitin Gadkari on 4 July and to the Prime Minister on 24 February, 13 June, 23 June, 5 August, and 30 September 2018. But there had been no reply from either. Swami Sanand was disappointed with the government as well as civil society including the IIT Consortium and therefore had put his

life at stake. And we simply let this Seer die fasting! Nobody came to see him from the Ministry of Water Resources, River Development and Ganga Rejuvnation. He was admitted to All India Institute of Medical Sciences, Rishikesh but continued his fast there even after a month. The second time he was admitted there, he died. The central government did not take even a step to convince him to give up his fast. This raises questions on the intention of the government. It appears that the government deliberately ignored Swami Sanand's fast.

40-year-old Sant Gopal Das, a Jain saint, who has fasted earlier for the release of encroached grazing land for cows in Hariyana, inspired by Professor Agrawal also sat on a fast for the same cause two days after Professor Agrawal began his fast, on 24 June, 2018 at Badridham temple in Badrinath. He was kept in the Intensive Care Unit of AIIMS, New Delhi after being moved about to different hospitals in Uttarakhand, Chandigarh and New Delhi.

On 4 December he was taken to Dehradun from New Delhi and left outside the office of District Magistrate. After that, he got admitted to a hospital in Dehradun but was untraceable after 6 December, 2018. He mysteriously appeared in a video on 29 April, 2019, 133 days after having gone missing, claiming that there was a threat to his life. His present status is unknown.

26-year-old Brahmachari Aatmabodhanand began his fast on 24 October as a sequel to Prof. Agrawal's fast at

Matri Sadan in Haridwar. Even when Professor Agrawal was alive, the head of Matri Sadan Swami Shivanand had warned the ruling BJP, in power both at Delhi and Dehradun, through persons belonging to RSS who were visiting him, that if anything happened to Swami Sanand he and his disciples would continue the unfinished task undertaken by Prof. Agrawal. Professor Agrawal's fast was the 58th fast by a saint associated with Matri Sadan and Aatmabodhanand's was the 59th.

Brahmachari Aatmabodhanand dropped out of a Computer Science graduation programme in Kerala and became a saint at the age of 21. When he saw the commercial orientation of various ashrams in Uttarakhand he was disappointed. He met Swami Shivanand in Badrinath and decided to accompany him. When he came to Matri Sadan and read a book on Swami Nigmanand, 'Pranopasana,' he knew he was at the right place. He liked the idea of joining a group of saints struggling to save the environment.

He is of the view that the government is in the grip of the mafia and hence unable to take any action. If they wanted to, they could take action because they have all the supporting evidence and required legal tools. But today the mafia and politicians have become indistinguishable. The present government diverts the attention of the people from the real issues. He said he studied with Muslim and Christian children and never felt any difference among the children because of religion.

He has fasted seven times earlier for the sake of the Ganga, at least once every year since 2014. In 2017

when he publicly protested against the DM of Haridwar, Deepak Rawat — who was patronizing illegal sand mining in Ganga — being given an award in the name of Madan Mohan Malviya, he was beaten by the DM and his security personnel in a room behind the stage and put in jail for a day.

During his eighth fast Aatmabodhanand was forcibly admitted to the hospital by the district administration on 29 November, 2018. When his condition started deteriorating on 1 December he left the hospital against medical advice (known as LAMA in medical parlance). When he was in the hospital Aatmabodhanand was told that he was suffering from dengue and his platelet count had dropped to 64,000, but after independently verifying it outside he discovered it to be 1,01,000.

Brahmachari Aatmabodhanand went to the Ardha Kumbh in Prayagraj during his fast for about twenty days with his mentor Swami Shivanand but no government representative thought it fit to meet him. The Uttar Pradesh cabinet meeting took place there, senior ruling party leaders including the Chief Minister went there but nobody had time for Brahmachari Aatmabodhanand.

Matri Sadan raised the question that when the government was not interested in dialogue and did not care about Swami Sanand's life and nor did it care about Brahmachari Aatmabodhanand, then why did it send a team of doctors to examine Brahmachari Aatmabodhanand's health? 62-year-old Swami Punyanand of Matri Sadan gave up food grains and was on fruit diet since Aatmabodhanand started his fast on 24 October and was prepared to shift to a water diet in the event of Aatmabodhanand becoming a casualty.

Both Swami Shivanand and Brahmachari Aatmabodhanand in their separate letters to the Prime Minister (see Appendices VII and VIII) have quoted Srimadbhagwat to say that when Ganga will become polluted with sins it will be the duty of saints to rid her of these sins by sacrificing their lives. But they have not remained content by considering it their duty to fast for Ganga as a religious exercise. They have chosen to criticise the government, its ministers, policies and also its attitude.

Both saints have accused the PM of adopting consumerism driven development policies which view the Ganga as merely a water resource to be exploited for profits. They reserved some of their harshest criticism for the then Minister of Water Resources, River Basin Development and Ganga Rejuvenation, Nitin Gadkari, whose capacity for appreciating the dignity of the Ganga had been doubted by Swami Shivanand.

Aatmabodhanand condemned Gadkari for having lied a day before Professor Agrawal's death that his demands had been met. Nitin Gadkari had laid down ecological flow specifications for different stretches of the Ganga and hydroelectric projects were expected to modify their operations to ensure compliance within three years. This was at variance with the Indian Institute of Technology Consortium recommendations and was unacceptable to Prof. Agrawal which he clearly expressed in an interview just before his death. Moreover, Nitin Gadkari was vague on the question of the future of hydroelectric projects and silent on mining in the Ganga.

Both saints, Shivanand and Aatmabodhanand, have been especially critical of the corporatisation of water - the bottled water industry and the marketing of 'holy Gangajal.' Swami Shivanand has come down heavily on Modi for his love for foreign sojourns and attempts to make the cultural city of Varanasi into Kyoto. Aatmabodhanand thought that this government is 'nationalist' only in name, otherwise it had a western view of development. He demanded from the PM immediate compliance with two of the four demands raised by Prof. Agrawal - halting of ongoing and proposed hydroelectric projects on the Ganga and ban on any mining in it as an expression of homage to Prof. Agrawal on behalf of the country.

Aatmabodhanand had criticised the government for having considered Prof. Agrawal's fast as 'one man's intransigence.' He said Prof. Agrawal represented the pain felt considering the condition of the Ganga, the state of the global environment, immoral development policies promoting crime and corruption and the irrational human bent upon destroying all living beings, the environment and the culture of co-existence. He felt it was the arrogance of power because of which the government refused to recognise Prof. Agrawal as a representative of this pain felt by what he described as 'the

tradition of saints willing to sacrifice themselves for the sake of the Ganga.'

Support had been received even from Bangladesh for the struggle to ensure Aviral and Nirmal Ganga which shows the issue affects lives of people across India's border too.

Prof. G.D. Agrawal had been demanding an uninterrupted flow and a clean Ganga. He wanted all ongoing and proposed hydroelectric power projects on the Ganga to be scrapped and all illegal mining to be halted. After his martyrdom when the government enquired from Swami Shivanand — the head of Matri Sadan who is leading the struggle of saints and has taken a personal resolve to stake the lives of the saints of his ashram one after another, including his own life — as to what was the 'botttomline' of his demands, he replied that three hydroelectric projects, Singoli Bhatwari on Mandakini, Tapovan Vishnugad on Dhauli Ganga and Vishnugad Pipalkoti on Alaknanda and mining in the Ganga must be stopped.

Brahmachari Aatmabodhanand's fast ended on 4th May 2019 on a letter addressed to Swami Shivanand(see Appendix IX) from Rajiv Ranjan Mishra, Director General, NMCG, assuring that all illegal mining would be stopped in Ganga, but without a firm commitment to action against dams. Even in earlier letters DG, NMCG (see the same Appendix) issued on 9th October 2018, the day Prof. G.D. Agrawal gave up water and on 26th April 2019, a day before Brahmachari Aatmabodhanand was to give up water, he just ordered the stoppage

of illegal mining. Although he didn't mention anything about the dams, unofficially he agreed to stop the four dams that were mentioned to him by Swami Shivanand including Phata Byung and review all dams on which half the work was not complete. Swami Shivanand, in reply to his letter dated 5th May, 2019, brought the discussion about dams on record (see the same Appendix).

Rajiv RanjanMishra also agreed to implement the declaration of 30% environmental flow by Nitin Gadkari just before the death of Prof. G.D. Agrawal on 11th October, 2019, within three years, in his dialogue with the Ashram. However, in September, 2019 after review, the period of implementation was reduced. The e-flow is much less than what is recommended by the IIT Consortium report. See Appendix X for the e-flows recommended at various locations in upper reaches of Ganga under various conditions.

The United Nations also took note of the fasts and the death of Prof. G.D. Agrawal as well as that of Swami Nigmanand and reminded the Modi government that much more needed to be done to make the Ganga clean (see Appendix XI).

However, after a resounding victory in the 2019 Lok Sabha elections and its ascension to power for a second time, the Narendra Modi government having realized that it was failing woefully in its objective of making Ganga clean and was also embarrassed for having allowed Prof. G.D. Agrawal to die, silently, without any discussion, changed the name of the Water Resources, River Development and Ganga Rejuvention Ministry to

Jal Shakti. This was also a clear message that the government would pursue its objective of building dams and didn't care about the sadhus going on fast and staking their lives. Now we don't hear of the Ganga or the Namami Gange so much.

There were various efforts by civil society to support the cause for which saints were willing to sacrifice their lives. See Appendix XII for (i) a signature petition while Prof. G.D. Agrawal was sitting on his last fast, (ii) another petition addressed to the PM, Minister of Water Resources, River Development and Ganga Rejuvenation and CM, Uttarakhand by environmental groups and citizens while Brahmachari Aatmabodhanand was on fast, (iii) a pamphlet used in a solidarity feet march taken out from Delhi to Haridwar in March 2019 while Brahmachari Aatmabodhanand was sitting on fast and (iv) a comparative poster prepared by Bharat Jhunjhunwala which was put up at public places before the Lok Sabha elections which showed that the Congress did marginally better than the BJP in working for the conservation of the Ganga.

References:

[1] https://latikaroy.org/jo/2018/10/07/saving-gangascientists-last-stand/

[2] 'Gangaaputraavadaanam,' book on Swami Nigmanand by Dr. NiranjanMishra

[3] 'Vaidik Pranopasana,' Year 1, Issue 1, June 2016, Matri Sadan publication

[4] 'Matri S Sadan pub	Sadan ki Sadhna olication	: Vaidik Pranopa	asana,' Matri

THE DIFFERENCE BETWEEN THE VIEWS OF PROF. AGRAWAL AND THE GOVERNMENT

Swami Gyan Swaroop Sanand had put forward a draft for the National River Ganga ji (Conservation and Management) Act in 2012. The government came up with the National River Ganga (Rejuvenation, Protection and Management) Bill in 2017 and updated it in 2018. The two draft Bills however, differed in their basic perspectives.

During his sixth and last fast he wrote to PM Narendra Modi on 5th August 2018 that whereas the National Environmental Appellate authority of the previous Manmohan Singh government had suspended the Lohari Nagpala hydroelectric project even after some construction was over, on his clearly articulated demands and declared a length of 135 km of the Bhagirathi from Gangotri to Uttarkashi as an Eco-Sensitive Zone (which means no destructive activity could take place here), the present government had not done a thing for the conservation of the Ganga even after four and a half years of being in power.

He repeated his four demands which he had intimated to the PM before going on fast:

- The draft prepared by him along with Advocate M.C. Mehta and Paritosh Tyagi, among others, be placed before and passed by the Parliament.
- 2. All under-construction and proposed hydroelectric projects on streams directly flowing into the Ganga in the upper reaches, the downstream and its tributaries be scrapped with immediate effect.
- 3. All mining and deforestation activities be banned in the Ganga basin.
- The Ganga Bhakt Parishad be formed to work to protect the interests of the Ganga.

He never heard from the PM until his death, even though during his fifth fast in 2013 Rajnath Singh as the then Bhartiya Janata Party president had promised him that all his demands related to Ganga would be met when the Narendra Modi government would come to power.

Prof. Agrawal wanted the Ganga to be declared a national symbol. His main emphasis was on the conservation of the Ganga in its natural pristine glory, with an unobstructed natural flow, which he called *Aviral*, and unpolluted water quality, which he described as *Nirmal*. He also wanted a ban on the discharge of any untreated or treated sewage or industrial effluents in the Ganga, the incineration of any kind of solid waste, the setting up of any kind of unit discharging pollutants, deforestation, illegal stone quarrying and sand mining, the construction of river-front development structures and the use of chemicals or hazardous substances in its vicinity.

These have become necessary today if any river is to be protected against destruction and degradation. It is important to know that Prof. Agrawal's learnings emerged from his engineering experience with Rihand dam while working for the Uttar Pradesh State Irrigation Department.

As a true scientist Prof. Agrawal precisely defined Aviral to mean minimum environmental/ecological flow at every place, including the downstream of each dam, and at all times with universal bed, lateral, open-to-air, longitudinal and temporal connectivities. He believed that to preserve the unique qualities of the water of the Ganga, that is, non-putrefying, disease destroying, health enhancing and pollution destroying, it was necessary to ensure its Aviral flow.

Similarly, Nirmal doesn't merely mean meeting the standards on water quality related to pH (measure of acidity or alkalinity), Dissolved Oxygen, Biological Oxygen Demand, Chemical Oxygen Demand, Total Dissolved Solids, Free Chlorine and Total Chlorine, or water being treated by Reverse Osmosis process and Ultraviolet rays. The special 'self-cleaning' property of the Ganga, he concluded scientifically, is because of presence of bacteriophages, coliform destroying capabilities, the large amounts of exo-cellular polymers coming from the trees present in the Himalayan uplands, and a unique mix of heavy and radioactive metals and ultra fine silt or micro nuclei in the water.

Essentially it is the rocks, sediment, vegetation including medicinal plants — the whole ecology of the upper region — that contributes to the special property of Ganga described as *Nirmal*. For a detailed account of Prof. G.D. Agrawal's thoughts on the Ganga see Appendix XIII. This was compiled and issued during his fast by his ardent disciple Pranav Kumar Vasishta.

Nitin Gadkari, the then Minister for Water Resources, River Basin Development and Ganga Rejuvenation, is known to have publicly said that he understood the concept of Nirmal but not that of Aviral. It is quite obvious that accepting Professor Agrawal's concept of Aviral would disallow construction of any more dams.

The impression emanating from the ruling BJP government was that they didn't care about the country, its religions or its people but were only interested in 'development'. Development which is clearly corporatedriven and, as is now established, yields sufficient kickbacks to fund the next electoral cycle of the political party in power.

Hence even though a senior functionary of RSS, Krishna Gopal, who tried to mediate, said he agreed in principle with Prof. Agrawal's vision on the Ganga, the compulsions of realpolitik sealed the fate of Prof. Agrawal and by extension that of the Ganga. This threat will loom large on the life and livelihood of people living in other river valleys too.

The outlook of Prof. Agrawal was at variance with that of government, because of which no reconciliation was possible. As an example, on a copy of the draft The National River Ganga (Rejuvenation, Protection and Management) Bill, 2018, prepared by the government which was given to him during his fast by Rajiv Ranjan Mishra, Director General of the National Mission for Clean Ganga, for his comments he changed the sentence "Parliament declared it expedient and in larger public interest to take control for prevention, control, abatement of pollution and rejuvenation of river Ganga", to "Parliament declared it expedient and in larger public interest to lay down the responsibility for maintaining desirable flows and water, sediment and ecological quality and thus rejuvenation of river Ganga".

The government has conceived of a 'Ganga Protection Corps' as an armed force which shall follow the Code of Criminal Procedure, 1973, for the purpose of enforcement, rejuvenation, protection and management of the river Ganga under the proposed Act, treating

any punishable offence as cognizable and non-bailable. Prof. Agrawal, on the contrary, wanted people sensitive to and with a deep understanding about the Ganga to form a council which would take responsibility for the protection of the river.

It has been alleged that Prof. Agrawal wanted a religious body to decide on how the Ganga ought to be taken care of. This is not true. He wanted a 20 member Ganga Bhakta ('Devotee') Parishad, provisionally till June 2019, to be nominated by the PM, the members of which were to take an oath standing in the waters of the Ganga to act in its interest. He has nowhere said that these 20 people necessarily have to be religious.

In fact, Prof. Agrawal didn't want pliant bureaucrats, working to commercially exploit the Ganga in nexus with their political masters, to be heading the body appointed to take care of the Ganga's interests. In less than five years the head of NMCG has been changed seven times by the government. Prof. Agrawal wanted an Indian Institute of Technology kind of autonomy for this supreme body on the Ganga.

The government's approach is bureaucratic and it wants to protect the Ganga by policing. Prof. Agrawal's outlook was humane and ecological and he wanted to protect the Ganga by people's participation.

There is an effort by some of the admirers of Prof. G.D. Agrawal to establish a Chair in his name at IIT, Kanpur in the hope that some day his ideas will be accepted by the mainstream scientific community and somebody

will carry forward his work so that his ideas are implemented. Appendix XIV is an appeal to people to make contributions towards the establishment of this proposed Chair.

Reference:

[1] A Critique of Loharinag-Pala, Pala-Maneri and Other Hydroelectric Projects on River Bhagirathi, by Dr. G.D. Agrawal

VIEWS OF PROF. G.D. AGRAWAL'S COLLEAGUES AND STUDENTS

I admire my former colleague, Late Prof. G.D. Agrawal for his TAPASYA in pursuit of causes he believed in. I respect him for his thoughts that tie his individual actions with the collective goals of a Civilization in the making. If this is saying too little and too late it is but a measure of our understanding of ourselves and the miles to go before we can make his TAPASYA and our Civilizational goals, that are worth the effort, bear fruit.

 Prof. P.R.K. Rao, Electrical Engineering, IIT Kanpur, a contemporary of Prof. G.D. Agrawal



It is rare, very rare, to find a person who is academically qualified and committed to his cause.

 Bharat Jhunjhunwala, Economist-Writer who was close to Prof. G.D. Agrawal and was facilitating dialogue with government while he was on fast.

...

GD as he was popularly known in IIT Campus never believed in conforming with the common stream. He was very different from the common Academic and believed in taking up social causes even if he had to go against the establishment. His commitment to social causes started with issues within the IIT Kanpur Campus but slowly expanded to cover society as a whole. He took the issue of the purity of the Ganga, as he saw it, and pursued it even at the cost of his life, the Great Tapasya. He will always be remembered for his courage, determination and selfless service to society.

- Prof. Ramesh Srivastava, Physics, IIT Kanpur, 1961-96, contemporary of Professro G.D. Agrawal.

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Part-A

Dr GD Agarwal: As I remember him as a colleague and neighbour at IITK

Dr GD Agarwal was our neighbor for six years (1966-72) at IIT Kanpur. After his return to from the US where he earned a PhD, and a 'double promotion' (Lecturer to associate Professor) at IITK moved into an apartment (No. 304) adjacent to ours (303) in the Old type III Quarters, about 6 months after we did. That was in late 1966. I was living with my family - wife, two children and an old aunt, he was single. His younger brother who was doing B Tech stayed with him. Some people, probably his relatives or friends from the city or from the village, visited him at home. An aunt used to stay for some weeks when she visited him. A junior employee of the institute lived in the servant quarters block nearby and served as domestic help in his spare time. We seldom saw fellow faculty visiting him at his house.

Unlike my other neighbour Dr. G.N. Rao of the Physics department and who lived with his wife, two children and a younger brother, with whom we had close social interaction at family level, our interaction with Dr Agarwal, who was a bachelor, was rather sparse. His appearance was austere, in dress and bearing, countenance somewhat pensive. He was gentle and always courteous when spoken to as we met on the front lawns of the block, or walked together to the institute. Our conversations which used to be brief and on general topics, seldom academic.

In 1972, we moved to out of the block of apartments. I saw Dr Agarwal but infrequently. I used to hear about him from his colleagues in his department with whom we used to interact frequently. As it generally is with unorthodox persons, he was spoken of somewhat dismissively though never with disrespect.

Once (I heard) Dr Agarwal announced in his class of a graduate course that students may answer the questions in the examination (end semester?) in any language of their choice. He will have the answer scripts examined and evaluated.

There was much freedom given to faculty at IITK in conducting of a course and method of evaluation of the students' performance. But this was radically different from the general practice. It was probably experimental. The composition of graduate student population in most departments of IITK was diverse. IIT Kanpur was a highly popular institution in those years for some reason. It was qualitatively different from the other similar institutions, probably for the freedom given to the students and to the faculty in their academic pursuits. There was a sizable graduate student population-more than a third,-from the Southern states of the country. So also was the case with the faculty.

It must be the case with the class of the above course too. I do not know if any student chose to avail the option given. If someone opted to avail, Dr Agarwal would have little difficulty finding a suitable examiner in his department within the institute. The faculty of Civil engineering was as cosmopolitan as its students. But the fact that such an offer was made by an instructor is indicative of his attitude to education and boldness to experiment.

In the later years, probably during Dr Agarwal's tenure as the Head of Civil Engineering Department or thereafter, (once again, I heard) at one stormy faculty meeting, Dr Agarwal was visibly upset, distressed to tears, grieved at the sad state of affairs in the institute. That was the time it was generally perceived that the institute was doing very well. I think, soon after that he left the institute. Dr Agarwal's metrics for evaluation of an educational institute were probably different.

During our 5 year stay as his neighbour, there was a incident, minor but not trivial in nature. One day we suspected a trespass of a sort, by an unidentified person, possibly from his quarter. I informed Dr Agarwal of our suspicion and suggested that it could be his domestic help. Dr Agarwal said that it was unlikely that it was that person, but he will inquire. The same evening, he informed me that there indeed was a transgression, he was ashamed to say that the culprit was his guest, expressed his regret for the unfortunate incident. He will instruct the person to personally apologise to me. The next morning I noticed a slip of paper under the main door, a brief note of apology.

A lesser person would have disowned responsibility for the unpleasant incident, of the occurrence of which, we had mere suspicion. The speed with which he investigated our complaint, and extracted the confession of transgression, the urgency with which he exposed the identity of the person to us surprised me. This called for extraordinary rectitude, responsibility and courage. Those were heady days of much glamour, achievement and not so much of sensibility to finer aspects of conduct. If I were in his position, I am

not sure that I would not resort to attempting at hedging, to save myself and my guest from embarrassment. Dr Agarwal was no ordinary person.

I met Dr Agarwal some years later, in mid nineties at Chitrakoot, when I was with a party of Civil Enginering Department on a visit to the place. He was very happy to see us, took good care of all, refreshments and other little comforts-wise. He was associated with a rural university at Chitrakoot.

Part B

Sant Sanand and his tapasya- as I learned from friends

I once again heard about Dr. Agarwal- now Sant Sanandin the early days of his last fast, which tragically turned literally fast unto death. It was through an email from Dr. P.R.K. Rao, who had to do some chiding his correspondents who initially were rather unresponsive to his call at the beginning, and some goading them to action of some sort.

The collective action- even if mostly only on paper by many, and efforts made by some to directly negotiate with the government may have made some impression on the Central Government but not enough to take serious note the Sant's deep concern for the cause of the physical environment and the spiritual and cultural capital of this country.

In order to effectively persuade the government to take suitable, speedy corrective action as demanded, or in any other suitable manner, one has to either succeed to convince them by reason, or gain sufficiently strong and wide public support for the cause, across the country and outside, and turn the movement into countrywide intense, sustained public agitation.

We noted from the Sant's public statements that his opposition to the imminent execution of the hydro-electric and development projects was predominantly on the grounds of public sentiment-veneration of Ganga Mayi, protecting her sanctity and only thereafter, on grounds of concern for the environment. Furthermore it chose not to address the counterarguments namely, the promise of the government projects for increased industrial activity, increased employment for the people, and overall development of the state, following the execution of the proposed projects. On all these aspects the Sant had authentic knowledge. At least from appearance, this failure may have been partly responsible for the insufficient efficacy of his austerities.

However, the pious sentiment, strong attachment and deep reverence that people hold for Ganga Maayi varies in intensity across the nation, even across the states through which the river flows and directly affects the life of the people in one way or the other. Furthermore, such feelings of reverence, sanctity, are progressively dwindling over time among all people in general.

The issue of the environmental aspects however well established in theory and practice, has not been translated

yet and disseminated widely enough that the public would identify itself strongly with the cause and display their support more visibly.

The most important factor is the support of the local people for the movement.

How strong was the support from the people of the state, overwhelming? If it was not, could it be the promise of benefits accruing from the proposed government projects on the Ganga, especially of employment to the people of the state be a reason? Could there have been in this matter, conflict between the material and the cultural needs, the short term gains and long term loss, between the local and global interests? Was it the reason for our failure to mobilise enough public support to make this government sit up and listen?

Some among the correspondents on this issue were doubtful of the chances for a happy outcome of the Sant's fast even if it was not expressed in so many words. I wonder what the assessment of people who have been on the field.

Perhaps the Sant knew the slender chances of positive response from the government to his tapasya. He chose to lay his life if only in the cause of his pious sentiment and of the millions in this country, for their Ganga Mayi for whose integrity, dignity and sanctity he fought, among others, tirelessly in his life.

Some of us suggested that people close to him persuade Sant Sanand to give up the fast and continue working for the cause to gather enough support. I am sure that many of you have tried to do that in person.

He was probably too tired to take up the fight again. He only wanted to lay in the lap of his dear Ganga Mayi. May be that was the way he wanted to make the exit. Not defeated. In that frame of mind, the immediate material consequences of his tapasya mattered little to him. But there was a certainty that truth will prevail. Good sense will return sooner or later to the world.

Sooner, if a spark of his tapas ignites a flame of inspiration in people, in sufficient number, who will continue to pursue the cause with vigour, perseverance and some pragmatism without sacrificing integrity of the effort. And some introspection in the minds of the powerful, in the government and outside.

If not, this may go down in history as a noble sacrifice, even if unsuccessful but not futile, made for a worthy cause. History is replete with accounts of such instances of glorious defeat, noble sacrifice, inspiring lives of people if not always to action, but to hold as an ideal to guide them in life.

I hope that the effort to chronicle the life of our friend Dr. G.D. Agarwal will inform people young and old, of a purposeful life led by a person of exceptional integrity who gave his life for a noble cause, and inspire them to take over his fight for a good cause of great importance for the material, cultural prosperity and welfare of the country and an example to the world.

 Prof. C.V.R. Murti, Aerospace Engineering, IIT Kanpur, 1966-98, contemporary of Prof. G.D. Agrawal.

...

GD had a capacity to act even when he was entirely alone. The pain of mother Ganga became unbearable for him, so he said he had to act. His fast was a spiritual intervention in the socio-political process. It can be seen as inaugurating a new chapter in ontological politics in India in which forests, mountains and rivers are destined to play a human role. Maa Ganga's recognition as a 'person' by the Supreme Court may be remembered too.

 Sunil Sahasrabudhey, activist-colleague of Prof. G.D. Agrawal.

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Such a remarkable human being

We were on the bus from Shahdol to Varanasi. Suddenly, "roko-roko" urged my companion to the driver, leapt out of the bus, and disappeared. A few moments later he returned, beaming, clutching a leafy plate of hot jalebis! This was the quintessential Guru Das Agrawal who knew every delicacy (and cinema hall) on any route he covered, and this one he had travelled many times in the early 1960s when he was a young engineer building the Rihand dam, one

of the pioneering 'temples' of Nehruvian India near Renukoot.

GD joined IIT Kanpur after building the dam and then went - somewhat unwillingly, but the Director told him it would be a violation of the technical collaboration agreement signed by the IIT with the USA - to the University of California at Berkeley to complete his PhD. Once there, he revelled in the opportunity for learning that the university offered. But, apart from his academic pursuits, he also founded, along with some other remarkable expatriates, the Front for Rapid Economic Advancement of India (FREA India) as part of his continuing contribution to national rejuvenation. This curiously named 'Front' was a product of the thinking in those early days that without economic progress India would not be freed of poverty, and that science and technology were the chosen instruments for that progress. In 1969, a conspiracy by some of my fellows at the IIT Bombay, also driven by the same ideas into setting up FREA in India, lured me into joining and I was advised to go and meet GD who had returned to India and was again teaching at IIT Kanpur.

The opportunity offered itself when the new FREA in Bombay received a request for help from the publisher of a small Hindi weekly in Shahdol, complaining that people were suffering from the effluents released by the largest paper mill in Asia but the company refused to acknowledge that it was polluting the river Sone. This was well before there was any environmental legislation in India. So I boarded the earliest train to Kanpur and met GD. He asked me what I thought could be done. All I could think of was to some-

how measure the pollution levels. He proceeded to dismiss every one of my ideas, and then slowly rebuilt all of them into a coherent whole. I was to discover that this was a characteristic pedagogic style of his: listen patiently to what the learner has to say; demolish it ruthlessly so that the learner is left shattered; then provide a much more elegant structure to rethink (accompanied, of course, with generous helpings of aloopuri and kheermalai!). Four wide-eyed students were recruited from IIT Kanpur and that summer they conducted in Shahdol what was probably the first community-based environmental impact study in India. Sudhindra Seshadri was one of those students and he recalled that GD later said to him, "the value of something is what it leads to".

GD's concern for his students was legendary. Once, when three of them found they could not complete their course work because they had to leave for the USA, GD literally hauled them back from the railway station, took extra classes, and saw to it that they completed the course. It was probably the same kind of mentoring that led Anil Agrawal to set up the Centre for Science and Environment in 1980; and me, with a few other hare-brained fellow travellers, to move to Shahdol in 1973 to design an Environmental Plan. GD was a frequent visitor to Shahdol over the years and kept pointing out other ways of looking at the problem. We had acquired a second-hand Fargo pick-up truck and Arvind Gupta converted it into a diesel version. Much to his dismay GD rechristened it, first as no-Far-go and then as Nearstop, on the basis of its erratic performance; although he was happy to bounce along as it rattled all over the district. Many arguments raged with him as we mined

his encyclopaedic knowledge of chemistry, physics, biology, and botany to understand the society we were living in; and GD was often arrayed on the other side. As Arvind later confessed, "I was too much in the 'left' mode to understand and appreciate a gentle soul like GD"; but Sudhindra remembers GD saying, "I don't agree with you guys, but I love you."

It was this love for learning and teaching that remained at the core of his being. Atul Jain, one of his close students at IITK, once asked him why he did not get married. GD's response was, "The day I stop teaching you can ask me to get married. I can't do both." That, of course, did not prevent him from vigorous match-making as he would ask, with a twinkle in his eyes, "What do you think of A's suitability for B?" GD moved on from IITK to become the Member-Secretary of the newly formed Central Pollution Control Board — he was, as Sanjeev Ghotge, yet another IITK product reminded us - India's first 'technically qualified' environmentalist. From that period, the teaching and learning began to extend into the realm of all those young people outside the university system who were trying to tackle the problems of the environment. The Air Pollution Act was passed at this time and GD realised that Indian companies did not have the monitoring equipment required by the Act. When the big firms he called did not respond he roped in another ex-student, S. K. Gupta, to set up Envirotech to produce high volume air samplers. When GD finally resigned in disgust from the Pollution Board, SK reminisces with a chuckle, "I roped him in right back and he managed Envirotech into a successful company."

It was in the same spirit that he came to guide me through World Wide Fund for Nature's first (and last) workshop in 1990 to develop low-cost pollution monitoring techniques that would be useful for communities. The week-long workshop attracted an array of scientists, community organisers, activists, and trade unionists, and he was hugely influential in taking environmental science to the grassroots. In the meantime he also began the move to Chitrakoot where he helped in setting up a department of environment at the new Mahatma Gandhi Gramodaya Vishwavidhyalaya, and also began preparing for retirement into avriddhashram there. But the Banwasi Sewa Ashram in Sonbhadra sent me an appeal for help in monitoring pollution, I asked GD, and he happily jumped at the chance to return to the area where he had begun his career as an engineer. But what he saw of the complex of thermal power plants that had come up around the Rihand dam he had built and its reservoir, and the ensuing massive degradation, appalled him. This sparked off yet another experiment with community-based impact assessment with the Ashram, although GD would keep prodding me, "Where is the people's movement?"

He would often put this question to Shubhabehn of the Ashram, and she remembers how at a public meeting on environment, after all the heads from different villages had spoken, GD gave vent to his flaming temper at all the talking and no action. He could be calmed down only after they gave him a written plan of action and took an oath that they would follow the plan and produce results by a given date. As Shubha recounts, "Even his anger was for us a prod to think and learn. He tore apart our note to help us to build

a more practical plan." Ramkumar Vidyarthi, a child rights activist with Sahjeevan Samiti at the time, writes on Facebook of a different pedagogical approach which GD adopted in Tarang village. The primary school teacher there was often drunk and no amount of persuasion would get him to kick the habit. When GD expressed a desire to visit the school on Teacher's Day everyone was in a quandary. Sure enough the teacher came smelling of mahua, but GD offered him flowers and a copy of the Gita and then touched his feet before explaining to the children the importance of the day. According to Ramkumar, "there was great improvement in both the teacher as well as the villagers, who rebuilt the dilapidated school".

It was, I think, a combination of all these stints at teaching, in the government, a consultancy firm, with activists, and community groups all over the country that gradually led him back to his roots in western Uttar Pradesh. As he said, "I have to live my life by my code so why should I have to listen to what others say?" He became a swami to singlemindedly pursue his goal to see a clean Ganga once again. He brought his vast scientific knowledge to bear on the subject and tried to persuade the government as well as religious and social organisations to take some action, but he failed. He finally embarked on his final fast-unto death on June 22 this year (2018). In August, Ravi Chopra (another old FREA hand) and I drove down to Rishikesh to see him and he was as matter-of-fact and lucid as ever. He gave us a clinical description of his symptoms and said, "I think my body will last for another six weeks. But don't worry about me. I am satisfied with what I have done and my going will

only give you more strength to do what needs to be done." What could be more inspiring as guru-darshan?

 Dunu Roy, Activist and close associate of Prof. G.D. Agrawal.

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I am from Muzaffarnagar, proper, Dr. Agarwal comes from Kandhla, sub division. He generally stayed in Muzaffarnagar with his maternal uncle, late Shri Ferozi Lal. From the beginning he was of a very simple nature. He got his B.Tech. in Civil Engineering from Roorkee University which was considered a Mecca for this field. Professors N.C. Nigam and M.P. Kapoor were his class fellows.

- Giriraj Kishore, Litterateur and former Registrar, IIT Kanpur

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I did not know Prof GD Agarwal personally, though I had visited him during one of his fasts. I have seen him active for the cause of the Ganga for over a decade now. He has possibly made the biggest contribution for the cause of Ganga, more than any person that I know of. We may not always agree with his message of saving the Ganga only for religious or spiritual reasons (we feel all rivers need to be treated equally and the social and environmental issues related to the Ganga cannot be ignored in single minded

spiritual focus), but we still cannot but salute him for his amazing contribution and sacrifice he made for the cause of the river.

 Himanshu Thakkar, Coordinator, South Asia Network on Dams, Rivers & People, IIT Bombay, 1984 and former Narmada Bachao Andolan activist.



"Every vidyā has four stages as per Bhāratīya paramparā. They are Adhīti - Bodha - Ācharaṇa - Prachāra. The complete presence of 'Vidyā' occurs only at a place where all the four are together. Learning something for one's own self, teaching the same to the other, following that which is taught in one's own life and in turn getting others to follow the same -- these are the four stages. Following what one does not understand, and not following what one understands is never a part of our Śāstra-s."

(Translated to English from Telugu Novel: Veyi Padagalu by the first Jnanpith Awardee in Telugu: 'Kavisamrat' Viswanadha Satyanarayana. This novel was translated to Hindi by Shri P V Narasimha Rao as 'Sahasra Phana' in Hindi and it received a Sahitya Akademi Award for Translation.)

Prof. Gurudas ('GD') Agrawala/Swami Gyan Swaroop Sanand lived to uphold this paramparā throughout his life, and it is from within that paramparā that he found the way to leave his mortal body. The name 'Gurudas Agrawala' refers to 'the foremost among those who carefully ensure the word of one's Guru translates to reality'. As Design Engineer, Central Designs Directorate, Irrigation Department, U.P. - Engineer Gurudas Agrawala was a part of the team that constructed Rihand Dam, the largest dam in India by volume and also instrumental in the use of fly-ash along with cement in constructions for the first time in India.

I was fortunate to listen to this anecdote from Swami Gyan Swaroop Sanand when he reminisced during the course of his critique of our Indian Constitutional Polity where he mentions the risky choice he had to make when he was still in his 20s between staking his career/life or to uphold the knowledge that he learnt from his teachers to bring the use of fly-ash in Indian constructions and that he chose the latter resulting in saving crores of rupees for the nation. For the record, Government of India recognised this by awarding the then Chief Engineer of Rihand Project - Shri Sumant Kishore Jain with Padma Shri in 1963, and Shri Jain in turn stated in a private party to his team members that that Award truly belonged to 'GD'.

It is only a person of such conviction who can lead a life without compromising the learning he acquired, imparted, followed and inspired others to follow. The interview he gave to a student of IIT Kanpur in August 1977 as he quit IIT Kanpur gives a glimpse of his categorical thinking where the categories of reality are from within Indic thought. With time and experience, the clarity of the expression only improved and the most significant expression that reflects all his learning and wisdom can be found from his latest writings starting with the 1st Letter to the PM informing him of

his 6th and final "fast-unto-death" as a part of his 'Ganga Tapasya' started in 2008.

It is my belief that a true homage to his persona would be to understand, appreciate, imbibe and practice the linguistic sensitivity he displayed and the direct correlation it had with his actions. Having addressed PM Shri Narendra Modi as his dear younger brother, he begins with an advice: 'Attain fame and glory by fulfilling your duty towards your mother, father and ancestors' - an advice we ought to take equally. The task of understanding the wisdom filled expressions/actions of our ancestors and developing a sense of belief in them by experiential & evidential means is the need of the hour.

Prof. G.D. Agrawala/Swami Sanand focused on Ganga-ji -- but the message is wider. His emphasis on understanding the Adhi-daivika and Adhyatmika planes of our existence, his intense desire for 'Naisargika Dhara' in Ganga-ji which made him start his 'Ganga Tapasya', his ability to make Engineering decisions to translate this desire to what is feasible in current times - the seeking of 'Aviral Dhara' - a necessary condition for both 'Nirmal Dhara' as well as 'Naisargika Dhara' of Ganga-ji -- all these convey a method of how we ought to go about this task. The instance of Ganga-ji is an example shown by this teacher-par-excellence. He truly lived up to his Sannyāsa nāma - Gyana Swaroopa Saananda.

It is pertinent to end this by recalling that Adi Shankara's Ganga Ashtakam has a verse in the end that begins with: 'Sānandam Smarato Bhavishyati' -- And truly we ought to

remember Swami Sanand in future for the timely teaching that he left us with and by achieving his desire in the Adhibhautika plane of 'Aviral Dhara' - we only reinforce this teaching for all generations to come.

 Pranav Kumar Vasishta G V, Associated with Purnapramati – A Center for Integrated Learning, Bengaluru.

Mr. Vashishta was fortunate to learn from Swami Gyan Swaroop Sanand over the past three years during his visits to Purnapramati. Swami Gyan Swaroop Sanand was kind enough to thoroughly review a novel of 'Kavisamrat' Viswanadha Satyanarayana translated by him from Telugu to English as 'Trial of Tenderness' where he related to the tender-hearted character of the protagonist of the novel and shared his life story over five days referring to incidents in the novel.

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Interview of Prof. G.D. Agrawal in a student magazine, Pratibimb, 15th August, 1977, at the time when he quit IIT Kanpur:

I am headed to my village

(Goodbye Dr. G.D. Agrawal)

One of the oldest members of our faculty Dr. G.D. Agrawal (Civil Engineering) who taught since March

1961 has just resigned on this August 1st. Beginning his conversation he said, 'I did not come into teaching for the sake of earning a livelihood. I used to derive satisfaction from my work. But for the past several years because of the increasing pressure from the administration and interference in my freedom I have realized that it is not possible for me to do any meaningful work here. If I stay here I'll have to pay its price by remaining mentally unsatisfied. This I'm not willing to bear. All educational institutions are like this – hence I'll not go to teach anywhere else either. I intend to engage in agriculture in my village – rest depends on circumstances.'

Educational standards of the Institute

Dr. Agrawal believed that there has been much improvement over the last 4-5 years but since the arrival of Dr. Bhattacharya (pressing into action of) the high level bureaucracy has changed the direction of this reform at all levels and objective of all activities now is to please the 'boss.' He talks of the period of Dr. Kelkar when there was freedom to do research but there was no motivation, and now when motivation is there the freedom is gone.

From the point of view of research being relevant to the Indian context, the research done here is high level theoretical work which has no specific uses for our country. Afterall, 'How many times a second does a fly flap her wings may also be counted as research.'

Administration

On his differences with the administration he said that the democratic culture has ceased to exist and now there is authority of only one man. He clarified this point further by stating that, 'Our method of selecting the Head of Department by faculty members was beginning to be followed in other institutions too, but Dr. Bhattacharya has put an end to that method. Now the Head is chosen by the Director. There is no value to discussion in various meetings. That is because the Director's men have infiltrated these committees. Bureaucracy has taken over. Any given situation is analysed not on the basis of what is appropriate and what is not but based on whether it is in accordance with the Statutes of the Institute or not. For me rules are not holy words.

Reform

If the intention to reform exists then rules can be changed. For example if it is decided that rural development is the objective at national level then every year 10 out of 30 new faculty members can be chosen who'll concentrate on rural development. But if these people (the administration) are determined to select candidates based on the criterion of number of published papers as a holy rule then how may we expect that the objective will be fulfilled? On the other hand when it is a matter of their own individual self-interest, then they don't show slightest compunction in ignoring any rules. To have reform, it is not important which ideology or method you're following, but how com-

mitted and responsible are the higher level officials. If some high level official is not paying attention to the objectives then he should be punished or removed from his post. However, if you see the activities in the Institute over the last few years then it is clear that higher level officials have forgotten about the objectives and are busy in forming a kitchen cabinet.

After Emergency

The country has changed a little bit after the Emergency but our Institute remains the same. People who were silent earlier prefer to remain silent even now. Earlier only one man used to have his say, and even now the same man has the say. Regarding the workers' movement, he said that though there is some element working in favour of democratic functioning but the emphasis is on private demands as happens in any employer-employee relationship.

Regarding the students' role in reform of education system at the national level he was of the view that it was the job of people at the top to reform the worsening situation. If the teachers are truant the Director has to show the right path. If Director is corrupt then the Chairman, Board of Governors has to act. If he doesn't act then the Education Minister has to pay attention. Even if the students want what can they do? All they can do is make a lot of noise.

Interviewers

Naresh Kumar Sharma, then B.Tech., Mechanical Engineering student, IIT Kanpur, Class of 1979, currently Professor and Dean, School of Economics, University of Hyderabad

Rajendra Kumar Bordia, then B.Tech., Mechanical Engineering student, IIT Kanpur, Class of 1979, currently Professor and Chair, Material Sciences Department, Clemson University, South Carolina, USA

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This memory of GD goes back almost 40 years, as a testimony to his enormous mastery, both theoretical and practical, not only of various sub-disciplines of Civil Engineering but its relationship with other domains of knowledge including ecology and the overcoming of the dualism between environment and development.

This recollection is based on actual experience at Shahdol where / when I worked there along with Dunu Roy, Sudhindra Seshadri and Arvind Gupta and several other friends from non- technological backgrounds and disciplines. It is a case-study of how much can be accomplished on the basis of sheer knowledge competence even when hugely constrained by lack of available resources.

As a group working in Shahdol District of Madhya Pradesh, we had been engaged in developing an Environmental Plan for the district, based on detailed district level data which we had painfully collected. GD considered himself a part of the group and was a frequent visitor, engaging all of us in

vigorous debate which forced us to continuously view the surrounding reality from different perspectives. This was challenging because two of us were from Electrical Engineering, one from Chemical Engineering and one from Mechanical Engineering, and none from Civil Engineering. Dialogue was only possible at some meta-level transcending the various disciplines but GD, much older than us, never lost patience with us even as he coached us in the basics of his discipline.

It needs to be borne in mind that these debates were taking place at a time when Govt of India had yet to establish the Ministry of Environment and Forests, and also before the formulation of the three environmental laws covering the three states of matter: air pollution, water pollution and solid waste management. We were truly groping in an intellectual wilderness more baffling than the wilderness of natural surroundings.

One fine morning, sometime in 1979, GD turned up unannounced at our doorstep with the terse explanation that he happened to be passing by and decided to drop in. Quite unfazed at finding none of the others there, GD decided to use his time constructively to give shape to some ideas on local irrigation that he had in mind. He had been urging us to undertake the construction of small decentralised dams and canals in the surrounding areas in order to stabilise and boost agricultural development. Finding us unresponsive, he decided to take matters in hand.

At 6 o'clock the next morning GD was up and ready to get down to work. His first step was to undertake a visual survey of the watershed in which we were located. He was back by about 11 o'clock, having traversed on foot a significant portion of the watershed boundary and the several small rivulets that flowed in it. No instruments, not even a piece of paper did he carry with him.

Next he demanded from me a map of the surrounding area, a sheet of graph paper, a sheet of translucent drawing paper, a sharpened pencil and an eraser. Though thoroughly mystified and bemused, I was able to provide him with these which I recognised as the tools of his trade.

The contour map of the local area, on a scale of 1 inch to a mile, had a bit of a story behind it. At that time, maps on that scale were deemed restricted by Govt of India and not ordinarily available from Survey of India Office. Luckily, we had managed to obtain the map by buying it in a bookshop in London where it was available across the counter. GD was very happy for that small blessing.

Armed with these, GD got down to work. By evening, he had traced out the watershed boundary from the map, located the best sites for the construction of small dams and weirs, the sizes of dams that could be built based on local geological factors, the sizes of the proposed storages, the alignments of the canals on both banks and the sizes of the areas that could be irrigated.

The latter he manually computed using the graph paper provided. The only additional data he needed was the record of the local pattern of rainfall.

By next morning, GD had prepared an entire scheme for the development of local irrigation for stabilisation of agriculture in a few thousand acres of semi-drought prone area in one of the most neglected districts of the country. Later, he sent us a hand-written report incorporating his observations.

What was astounding was that GD had, in one day, completed the basic design of an entire small irrigation scheme work that would have taken a Govt bureaucracy perhaps an entire year to formulate.

Several things were learnt by me, purely observing from the sidelines. When, many years later, I did some work on Geographical Information Systems (GIS), I could appreciate that a person like GD could have designed hundreds of such schemes all over the country, armed with a single computer and the appropriate data. To the best of my knowledge, this work yet remains to be done. This is a small indication of the massively incompetent bureaucracies that continue to hinder the development of this country, seventy years after independence.

Many years later, while listening to a talk by Rajendra Singh, I gathered that GD had advised him about the locations and sizes of the Johads to be built in his area in Rajasthan. Rajendra Singh was kind enough to send me a copy of GD's original notes. Somehow, an impression has been created around the country that these Johads were developed based entirely on some form of "indigenous knowledge/wisdom". Quite the contrary, they were vetted by some of the best modern knowledge available in the country.

Lastly, as the failed irrigation experience of Maharashtra demonstrates, after public expenditure of an order of ₹70,000 crores on irrigation in the last couple of decades, Maharashtra has added a measly 1% to its irrigated area while farmers have continued to commit suicide... and climate change is likely to make matters worse.

This is the price the country pays for disregarding the sage advice of a person like GD.

Future generations of technologists, sadly, will miss having GD around. This is a great loss for us all.

 Sanjeev Ghotge, former student, IIT Kanpur, former-Professor at the Centre for Applied Systems Analysis in Development, Pune, now Senior Fellow heading the Centre for Climate and Sustainability Policy at World Institute of Sustainable Energy, Pune

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I met Prof. G.D. Agarwal ("GDA") first time in July 1961, when I entered as the first-year student at IITK at age 16. I was placed in hostel in Nawabganj, in what was an old bungalow, probably belonging to a British administrator in pre-1947 India, as its architecture was colonial in design. GDA was our first warden. He had come to IITK from UP-PWD. He was a graduate of Roorkee University. There were 16 students in this bungalow which has 8 rooms, 4 on either side of a central corridor.

GDA woke us up at what seemed to me to be an ungodly hour of 5.30 AM, and took us to a field nearby for physical exercises. It was really annoying, but raised in paternalistic society, this was to be accepted, with no questions asked, and in fact it was good for me, who had a tendency to stick to easy routine, though until 10th class of the 12 year precollege I had played cricket. Friendships develop quickly at that age and in fact most of my classmates remain friends even to this day. So, GDA was sen by me as a man who believed in disciplined living. He seemed to keep his distance from us, and did not indulge in idle chat of any kind.

In our second year, GDA organized a walk for us to our new campus near Kalyanpur, where our Institute buildings were under construction, on what I vaguely recall as the ground-breaking ceremony, a distance of about 9-kilometer, which seemed impossible to many of us for walking. Clearly many of us were not used to even moderate physical exertion, but we did complete this walk and found to my amazement that I was tired, but not really exhausted. Later in life, I ran distances of 21-kilometers many times, as I became a "jogger", but at that time, it confirmed in us the image of GDA as a strict disciplinarian. I credit my later discipline in life to physical exercises to GDA, and from it I benefited.

GDA left for UC/Berkeley soon after we moved to our new IITK campus in Kalyanpur, to do research in environmental engineering. I did not see him thru the rest of my time at IITK, from where I graduated in 1966. He however returned and taught at IITK for several years, and then left it to pursue his passion on ecology, particularly of rivers.

As it turned out I ended up living in Berkeley California for much of my life after leaving India in 1966, and it is where I saw GDA the next time, when he came here for a conference, in early or mid-1990s. He stayed with me for a day and we went walking in a nature preserve near my home. He was touched by my wife's cooking of fresh chapatis for my teacher and made it a point to say that to me. He was no longer the disciplinarian to me now, but still a teacher who I remembered affectionately. I knew by now that he had become a very prominent ecologist of India, but his mannerisms were the same of the simplicity and non-indulgent way of life I had seen him lead three decades before.

My last recollection of GDA is when he visited me at the hospital in Kanpur where I was admitted in January 2002. I had taken seriously ill during my visit to India and had to be admitted. By now he had retired and lived in a town in Madhya Pradesh. GDA remained a bachelor, I was aware. Having successfully establishing a company which produced water and air pollution measuring instruments, he had retired, turning over the company to those who worked under him. I was very weak and lay in my bed, as he entered the room, and then he sat down next to my bed and put his hand over my head, as a gesture of love and I felt once again I was like the young kid, but now rather than a disciplinarian, my warden was like my father comforting me. I realized then what a deep a sense of humanity and compassion that was in him from which flowed his struggle for river ecology. For rivers of India, and Ganga is the best symbol of all rivers of India, the source and sustenance of Indian Civilization as it evolved inIndia, and its protection from pollution and degradation is part of the challenge we

all face in ecological decay from our present course in development.

- Rajendra Sahai, former student, IIT Kanpur



Scientist and Tapasvi

G.D. Agrawal lived and died to awaken the collective conscience for the Ganga

India lost her true Gangaputra, Swami Sanand, also known as Dr. G.D. Agrawal, on October 11, the 112th day of his fast-unto-death seeking effective action from the Government of India for the conservation and protection of the Ganga.

GD, as many affectionately addressed him, was a good and rare human being. Dressed in ordinary khadi, before he took sanyas in 2011, his appearance belied his logical mind, formidable knowledge and accomplishments. He began his career in the 1950s as a design engineer with the UP's irrigation department, rose to head the environmental engineering department at IIT Kanpur, was the member-secretary of India's Central Pollution Control Board and a member of numerous official committees for setting policies and regulatory mechanism to improve India's environmental quality.

GD epitomized simple living and high thinking. A greater part of his last 25 years were spent in Chitrakoot, where

he became an honorary professor at the Mahatma Gandhi Grameen Vishwavidyalya. This eminent scientist swept his own floors, washed his clothes and cooked his meals in a Spartan 200-sq feet cottage. A bicycle, an ordinary state transport bus or second class train compartment were his preferred modes of transportation.

A former IIT-K student described GD as 'India's first technically qualified environmentalist.' After graduating in civil engineering from the University of Roorkee (now IIT-Roorkee), GD obtained a MS and PhD in environmental engineering from the University of California at Berkeley. At heart, GD was an activist. He was more attracted to experimenting with possible solutions rather than theorizing. Over the years he mentored many young development activists. The more well-known ones include Dunu Roy (IIT-Bombay, '67), who first headed the Indian branch of FREA, set up the innovative Vidushak Karkhana and later the Hazards Centre, New Delhi; Anil Agrawal (IIT-Kanpur, '70) founder of Centre for Science and Environment and waterman Rajendra Singh.

In 2007 on a visit to the Ganga's shrine at Gangotri, GD became aware of the plans to build a series of four dams upstream of Tehri, besides the Maneri Bhali I project. He realized that these new dams would destroy the only pristine stretch of the Ganga. After considering a number of options, GD announced his decision on April 14, 2008, to undertake a fast-unto-death from mid-June that year unless all the dam building activities on the Ganga between Gangotri and Maneri were permanently stopped.

His first fast brought the issue of environmental flows to the centrestage of the hydro-power production discourse. It led to the designation of the Ganga as India's national river. His second fast in 2009 led to the formation of the National GangaRiver Basin Authority. The third one in 2010 forced the UPA government to cancel all the three projects between Gangotri and Uttarkashi and the establishment of the Bhagirathi Eco-Sensitive Zone.

In February 2018, after waiting for almost four years, Swami Sanand wrote to Prime Minister Narendra Modi reminding him of his announcement, 'Mujhe Ma Ganga ne bulaya hai,' after winning the Varanasi Lok Sabha seat. He placed four demands before the PM, and wrote that he would fast-unto-death from June 22 if they were not fulfilled. These were: (i) Present a comprehensive Bill to Parliament, based on a draft prepared by the Ganga Mahasabha in 2012, to effectively conserve and protect the Ganga; (ii) Stop all hydro-electric projects under construction or proposed in the upper reaches of the Ganga and its six headstream tributaries; (iii) Ban river-bed sand mining in the main stem of the Ganga and (iv) Form an autonomous body of capable and committed persons to ensure the well-being of the river.

The PM never responded. On September 9, Swami Sanand announced that he would give up drinking water from October 9. Negotiations thereafter with government officials, cabinet ministers and senior leaders of the BJP and RSS proved fruitless. The iron-willed Swami Sanand chose martyrdom in the hope that it would awaken the conscience of the government and the people of India.

- Ravi Chopra, Ac G.D. Agrawal (Thi dian Express).	tivist and c s article wa	lose associ s publishe	ate of Prof. d in the In-

APPENDIX I: LIFE SKETCH OF PROFESSOR GURU DAS AGRAWAL

Birth: 20 July 1932, most likely in Kandhla, Muzaffarnagar, U.P. where he belonged to

Graduation: Civil Engineering, University of Roorkee, 1953

Worked as Design Engineer, Irrigation Department, Uttar Pradesh Government, 1954-60

Joined IIT Kanpur: 1 March, 1961 in the Civil (and Environmental) Engineering

Became Professor: 2 December, 1971

Resigned from IIT Kanpur: 2 December, 1977

Served as Member-Secretary, Central Pollution Control Board, New Delhi

Served as Director, Envirotech Instruments (Private) Limited, New Delhi

Served as Honorary Professor, Environmental Sciences, Mahatma Gandhi Chitrakoot Gramin Vishwavidyalaya, Chitrakoot, Madhya Pradesh

First fast:13 to 30 June, 2008

Second fast:14 January to 20 February, 2009

Third fast:20 July to 23 August, 2010

Fourth fast:14 January to 16 April, 2012on fruits in Allahabad, lemon water in Haridwar, without water in Varanasi afer which he had to be admitted in All India Institute of Medical Sciences, Delhi

Fifth fast:13 June to 13 October,2013

Sixth fast: 22 June to 11 October, 2018 at Haridwar

Death: 11 October, 2018 at All India Institute of Medical

Sciences, Rishikesh due to cardiac arrest

APPENDIX II: LIST OF FASTS CONDUCTED BY MATRI SADAN, HARIDWAR

S.N.	Duration	Details
1.	3-16 March, 1998	By Swami Gokulanand Saras- wati and Swami Nigmanand Saraswati for declaration of Kumbh region as crushing and mining free and to prevent passage of vehicles through the Ganga
2.	27 May-9 June, 1998	By Swami Nigmanand Saras- wati and Swami Gunanand Saraswati to prevent passage of vehicles through the Ganga
3.	1-9 June, 1998	By Swami Gopilanand against administration's brutality
4.	9-21 January, 2000	By Swami Nikhilanand Saras- wati and Brahmachari Divya- nand to reinstate honest police and administratrive officials for elimination of mafia rule in Haridwar
5.	7-18 February, 2000	By Swami Gokulanand Saras- wati, Swami Nikhilanand, Swami Gopilanand Saraswati and Brahmachari Manohar Das against corrupt judge of Hon'ble High Court, Allahabad at Nani Jail

6.	9-18 February, 2000	By Swami Shivanand Saraswati at Haridwar after his disciples were picked up by police from outside Allahabad High Court
7.	-11-29 July, 2000	By Swami Gopilanand Saraswati and Brahmachari Nareshanand to reinstate honest officials and to adopt a clean, clear and trans- parent transfer policy
8.	19-29 July, 2000	By Brahmachari Divyanand against inclement behavior of administration
9.	12 August-4 September, 2000	By Swami Gokulanand Saras- wati and Swami Sachchinanad Saraswati against betrayal by administration as it didn't fulfill its promise of arran- ging a meeting with the Chief Minister
10.	26 August 4 September, 2000	By Brahmachari Manohar Das against inclement behavior of administration
11.	5-24 September, 2000	By Swami Shivanand Saraswati who was arrested along with his disciples on 7 Septem- ber, 2000, the fast of Swami Shivanand as well as his dis- ciples continued in jall, Swami Shivanand was poisoned with Arsenic in jail
12	24 July, 2001-9 January, 2002	By Swami Gunanand Saraswati and Brahmachari Divyanand to demand enquiry by CBI inthe case of poisoning of Swami Shivanand in jail, two saints on fast were put in jail on 15

		August, 2001 when Nityanand Swami was the first CM of newly formed state of Uttarakhand
13;	11 August, 2001-9 Jan- uary, 2002	By Swami Gopilanand Saraswati against forcible lifting of saints who were on fast
14.	5 September-30 October, 2001	By Swami Gokulanand Saras- wati for sacking of corrupt CM Nityanand Swami of Uttara- khand at Jantar Mantar, New Delhi
15.	6 December, 2001	By Swami Sachchinanad at Gandhi Park, Dehradun against betrayal by CM Bharat Singh Koshiyari who had visited the ashram
16.	22 December, 2001-4 March, 2002	By Swami Nigmanand Saras- wati to demand enquiry by CBI in the case of poisoning of Swami Shiyanand in jail
175	8-22 April, 2003	By Brahmachari Divyanand for implementation of High Court, Nainital order against noise pollution
18.	6-12 April, 2004	By Swami Shivanand Saraswati against disorder and corruption in Ardh-Kumbh of 2004
19.	30 March-5 April, 2007	By Swami Nigmanand Saras- wati for investigation into withdrawal of security from- Matri Sadan
20.	10-26 May, 2007	By Swami Gopilanand Saraswati for investigation into with- drawal of security from Matri

		Sadan and against mining, for- est and land mafia
21	22 November-6 Decem- ber, 2007	By Swami Gopilanand Saraswati against mining in Kumbh re- gion of Haridwar
22	20 January-1 April, 2008	By Swami Nigmanand Saras- wati for declaration of Kumbh region as crushing and mining free
23.	6 February- 7 March, 2009	By Brahmachari Dayanand for declaration of Kumbh region as crushing and mining free
24.	15 October, 2009- 26 March, 2010	By Brahmachari Dayanand for declaration of Kumbh region as crushing and mining free
25.	27 October - 18 Novemebr, 2009	By Brahmachari Yajnanand for declaration of Kumbh region as crushing and mining free
26.	18 November, 2009- 9 January, 2010	By Swami Purnanand for declaration of Kumbh region as crushing and mining free
27.	20 January- 6 Pebruary, 2010	By Swami Shivanand Saraswati against reduction of Kumbh area. Administration left no measure to crush the movement from 15 October, 2009 to 26 March 2010 with a demand to keep Kumbh region secure. False cases were filed against saints and they were harassed in jail. On 5 February, 2010 it was decided to keep Kumbh region as it was in 1998.
28	20 July 24 August, 2010	By Professor G.D. Agrawala or Swami Gyan Swaroop Sanand

		for conservation of Ganga as a result of which three hydroelec- tric projects Pala Maneri, Lohari Nagpala and Bhairon Ghati were cancelled.
29.	18 November- 11 De- cember, 2010	By Swami Shivanand Saraswati demanding a clear government order to declare Kumbh region as crushing and mining free to keep it secure for future
30.	28 January- 19 February, 2011	By Brahmachari Yajnanand for action against two corrupt Judges and Registrar, Judicial of Uttarakhand High Court
31.	19 February- 13 June, 2011	Last fast by Swami Nigman and Saraswati. He offered himself for sacrifice by getting fast of Brohmachari Yajnan and terminated. On the 58th day of his fast, 27 April, 2011, district administration admitted him to district hospital in the name of medical check up. He was given glucose through veins and then liquid diet by a pipe through nose on 28 April because of which he became more healthy. However, on 30 April a nurse injected poison in his body because of which his health started deteriorating and ultimately he succumbed to death on 13 June, giving up his life fighting against judicial corruption and for protection of Ganga and environment.

		He died because of organ- ophosphate. CBI filed a closure report in collusion with mafia. Matri Sadan has moved the court against this, where the matter is pending. His body was cremated in ashram on 16 June, 2011. He was declared 'Ganga- putra' by media.
32,	30 July-14 August, 2011	By Swami Purnanand Saraswati demanding CBi investigation into Swami Nigmanand Saras- wati's death. Fast withdrawn after Dr. Verma received SMS from CBI spokesperson Dharini Mishra that decision to insti- tute inquiry was taken.
33,	25 November-5 December, 2011	By Swami Shivanand Saraswati demanding complete ban on mining in entire Ganga. Fast withdrawn after government order was issued on 5 th Decem- ber night.
34	8 February- 8 March, 2012	By Swanti Gyan Swaroop Sanand demanding cancellation of all underconstruction and pro- posed hydroelectric projects on Bhagirathi, Alaknanda and Mandikini. On 8 March he left for Varanasi while continuing his fast.
35.	6 August- 10 September, 2012	By Swami Shivanand with a 5 point demand, including in- dependent investigation into Swami Nigmanand Saraswati's death and expansion of Kumbh

		area. Fast withdrawn after an order by issued by administration.
36,	10 December, 2012-19 January, 2013	By Swami Purnanand Saraswati against mining in Ganga at Bishanpur and Bhogpur without any EIA done. On 22 December he was arrested u/s 309 of IPC, attempt to commit suicide. Dr. Verma files contempt case in High Court, Nainital. Notice against government issued and mining stopped. On 19 January, Swami Purnanand released from jail and ends his fast at ashram. Police filed a chargesheet in this case which was challenged in court. On 11 April, 2004 court found the case prima facie false.
37.	22 December, 2012-19 January, 2013	By Swami Shivanand begins his tapsaya, goes on one meal in 3-4 days and fruit once in a day, withdraws on 19 January, 2013
38.	13 June-12 October, 2013	By Swami Gyan Swaroop Sanand demanding cancellation of all underconstruction and proposed hydroelectric projects on Bhaghrathi, Alaknanda and Mandikini. On 1 August police filed a case u/s 309 of IPC against him and sends him to AHMS, New Delhi. On 9 August brought to district jail at 1 am. On 19 August HC takes notice and orders his release. On 22 August after release continues

		his fast at ashram. Decides to give up water after 100 days of fast against insensitive behavior of administration, state and central governments. Admitted by administration to district hospital on 24 Sep- tember and given liquid diet by pipe through nose. Terminated his fast at Vrindavan on 12 October.
39.	14 February-14 March, 2014	By Swami Shivanand against mining and for re-investigation into Swami Nigmanand Saraswati's death. On 9 March Uttarakhand government issues order for institution of SIT into Swami Nigmanand Saraswati's death case and on 14 March Enviornment Impact Assessment Authority issues order restricting mining within 10 km of Rajaji National Park without NBWL persmission.
40.	14-27 July, 2014	By Brahmachari Atmabodha- nand for ban on crushing and mining forever. Administration gave written assurance.
41.	27 August- 16 Septem- ber, 2014	By Brahmachari Atmabodha- nand for implementation of HC order against stone crushers. District Magistrate writes to Uttarakhand government.
42.	19 February - 12 March, 2015	By Brahmachari Atmabodha- nand against permitting mining in Ganga by CM Harish

		Rawat in violation of number of rules. DM Haridwar Harish-chandra Semwal issues order for cancellation of permits if required conditions not fulfilled. SDM Veer Singh Bughiyal offers juice to end fast.
43.	31 March-21 April 2015	By Swami Shivanand with a 5 point demand related to Kumbh region and Ganga. On 22 nd day of fast DM writes to Director, Mining for action on Environment Ministry report and NGT order and stops mining.
44.	16 May-7 June, 2015	By Brahmachari Atma- bodhanand for removal of DM Harishchandra Semwal and Director, Mining, Sridharbabu Addanki. On 2 June dialogue with Additional Chief Secretary Rakesh Sharma. On 7 June CM Harish Rawat offers juice to end fast.
45.	21 May- 7 June, 2015	By Swami Shivanand, who gave up water on 22 May, took Electral on 25 May when administration ordered Pokland machines out of Ganga, again left water on 28 May, took Electral again on 30 May when CS ordered ban on Pokland machines and mining in Ganga, on 2 June assurances from Additional CS Rakesh Sharma who came to ashram, on 7 June

		ended fast by accepting juice from CM Harish Rawat
46.	22-23 October, 2015	By Swami Shivanand against noise pollution
47.	28November- 7 Decem- ber, 2015	By Brahmachari Atmabodha- nand for action against people guilty of mining in Ganga and seizure of Crushers which bought material mined, fast withdrawn when DM wrote to government to ban mining, im- plement HC and NGT orders
48.	7 December, 2015	By Swami Shivanand for exapansion of Kumbh mela region and other demands, DM writes to Secretary, Urban Development
49.	9-19 January, 2016	By Swami Shivanand against CM Harish Rawat going back on his promise to treat region between Raiwala and Bhogpur as mining free and allowing mining between Bishanpur and Bhogpur, for declaration of area between Raiwala and Bhogpur as mining free and exapension of Kumbh region till Bhogpur. Fast withdrawn after assurance from CM that mining would be stopped and continute to remain so and a meeting would be held within next 10 days to issue order to declare region between Raiwala and Bhogpur as mining free.
50.	15 February- 18 March, 2016	By Brahmachari Atma- bodhanand for exapansion of

Kumbh region till Bhogpur. Fast withdrawn after Industrial Development department suspended mining in Riawala-Bhogpur region, allotted land plots cancelled and scientific committee constituted for protection of Ganga, On 29 February, ADM Jeevan Singh Nagnyal, SP(City) Navneer Singh Bhulllar, SDM Pratyush Singh, DSF Chandra Mohan Singh, SO. Kankhal P.S., Ritesh Shah came with 15-20 police personnel and broke the lock on his door, put with his consent for his security, to take him to Dehradun hospital where he was kept all night on a stretcher among other patients and finally admitted to AHMS, Rishikesh on 1" March at 3 pm, during this period he was not even asked for drinking water and was subjected to mental torture. When Matri Sadan learnt about his whereabouts on 2 March, he was brought back to the ashram where he continued his fast. 29 February-18 March, 51. By Swami Shivanand for 2016 exapansion of Rumbh region till Bhogpur. Fast withdrawn after Industrial Development department suspended mining in Riawala-Bhogpur region, allotted land plots cancelled and scientific committee consti-

		on 7 March, SDM Pratyush Singh and SO, Kankhal Ritesh Shah came with 15-20 police personnel, broke the front gate lock of Matri Sadan, cut the grill and iron mesh with cutter to enter the room where Swami Shivanand worships thereby disturbing his tapasya. Fast withdrawn after Additional Secretary, Mining issued orders banning mining in Ganga be- tween Raiwala and Bhogpur, cancelling allotted land plots and constituting scientific com- mittee for protection of Ganga.
52,	5-27 November, 2016	By Brahmachari Atmabedha- nand against illegal mining which was ignored. Swami Shivanand decides to enter 'Sanyam Tap.'
53.	27 November- 6 Decem- ber, 2016	Swami Shivanand enters 'Sanyam Tap.' Gives up water on 7 December, Tapasya withdraw after order by Central Pollution Control Board on 6 December, 2016.
54.	14-24 May, 2017	By Brahmachari Atmabodha- nand for implementation of HC order. Ignored by administra- tion and government.
55.	24 May- 5 June, 2017	By Swami Shivanand for imple- mentation of HC order, Ignored by administration and govern- ment. On intervening night of

		28-29 May attack by heavy po- lice contingent and attempt to strangulate. Strong letter issued by Ganga Rejuvenation Ministry on 5 June directing for strict action.
56.	30 October- 15 Decem- ber, 2017	By Brahmachari Atmabodha- nand, on 7 December forcibly lifted and admitted to hospital in Dehradun where attempt to poison him. On 9 January admitted to AIIMS, Rishlkesh where subjected to torture. Brought back by Matri sadan and ends fast on 15 December.
57,	15 December, 2017-13 January, 2018	By Swami Shivanand, on 29 December section 144 of CrPC Imposed, District Court gives stay on 2 January.
58.	22 June-11 October, 2018	By Swami Gyan Swaroop Sanand, on 10 July forcibly lifted by administration, pe- tition filed in Uttarakhand HC, returns to 23 July by a Court order, on 13 August on administration's request taken to AEMS, Rishikesh for treat- ment of acidity and return to Matri Sadan on 21 August, on 2 August Chief Secretary, Uttara- khand spoke to Swami Sanand over skype through a laptop computer, on 3 August central minister Uma Bharti comes to meet him and had him talk to Nitin Gadkari over phone, on 10 October section 144 of CrPC

		imposed, forcibly lifted and admitted to AIIMS, Rishikesh where he died on 11 October.
59.	24 October, 2018-4 May, 2019	By Brahmachari Atmabodha- nand as sequel to Swami Sa- nand's fast, on 29 November section 144 of CrPC imposed and SDM Manish Rumar forcibly lifted and admitted him to AIIMS, Rishkesh, where attempt was made to inject undesirable material into his body, used the option of LAMA to walk out of hospital, withdrew fast on written assurance of Rajiv Ran- jan Mishra, DG of NMCG.
60.	24 October, 2018- 4 May, 2019	By Swami Funyanand who was on fruit diet all along in prep- aration to take over from Brah- machari Atmabodhanand in case of any eventuality just like Brahmachari Atmabodhanand had taken over from Swami Gyan Swaroop Sanand.
61.	15 December 2019	By Sadhvi Padmawati, a female saint for the first time in his- tory of Matri Sadan.

APPENDIX III: HYDROELECTRIC PROJECTS ON THE GANGA

Existing: Badrinath, 1.25 MW, Tapovan, 0.8 MW, Tharali, 0.2 MW, Tilwara, 0.2 MW, Urgam, 3 MW, Vishnuprayag, 400 MW, Maneri Bhali I, 99 MW, Maneri Bhali II, 304 MW, Tehri, 1000 MW

Underconstruction: Kaliganga I, 4 MW, Kaliganga II, 6 MW, Kotli Bhel IB, 93.2 MW, Madhmaheswar, 10 MW, Tapovan Vishnugad, 520 MW, Shrinagar, 330 MW, Koteshwar, 400 MW, Koti Bhel IA, 195 MW, Koti Bhel IB, 320 MW, Koti Bhel II, 530 MW, Pala Maneri I, 480 MW

Proposed: Alaknanda (Badrinath), 300 MW, Bagoli, 72 MW, Bowla Nandprayag, 132 MW, Chuni Semi, 24 MW, Deodi, 60 MW, Devsari, 255 MW, Gaurikund, 18.6 MW, Gohana Tal, 60 MW, Jelam Tamak, 60 MW, Karnaprayag, 160 MW, Lakshmanganga, 4.4 MW, Lata Tapovan, 330 MW, Maleri Jelum, 55 MW, Nandprayag Langasu, 141 MW, Padli 27 MW, Phata Byung, 10.8 MW, Rambara, 24 MW, Rishi Ganga I, 70 MW, Rishi Ganga II, 35 MW, Singoli Bhatwari, 99 MW, Tamak Lata, 280 MW, Urgam II, 3.8 MW, Utiyasu, 860 MW, Vishnuprayag Pipalkoti, 444 MW, Bhaironghati I, 380 MW, Bhaironghati II, 65 MW, Bhilangana I, 22.5 MW, Bhilangana II, 11 MW, Gangotri, 55 MW, Harsil, 210 MW, Jadhganga, 50 MW, Karmoli, 140 MW, Tehri PSS, 1000 MW

Abandoned: Loharinag Pala, 600 MW

Reference:

[1] http://cganga.org/wp-content/uploads/ sites/3/2018/11/001_GEN.pdf

APPENDIX IV: EXCHANGE BETWEEN NITIN GADKARI AND PROF. GD AGRAWAL

LETTER FROM NITIN GADKARI TO PROF. G.D. AGRAWAL

Respected Swami ji,

As you know government is committed to ensuring Aviral and Nirmal Ganga and it is for this that it is implementing its integrated Namami Gange programme. A number of projects for purification of Ganga have been completed and we're hastening the pace of others. We're confident that results of most projects and remaining work will be visible on ground soon. An example of this is diversion of 80 MLD sewage out of 140 MLD flowing in Seesamau drain in Kanpur to the Bingawan Sewage Treatment Plant because of which sewage in Seesamau has reduced by half. Similarly other projects are also in completion stage.

This is a request to please give up your fast. I will be happy if you'll accept my request to communicate to me your invaluable thoughts in person.

Regards.

Sincerely,

(Nitin Gadkari)
Minister Water Resources, River Development, Ganga
Rejuvenation
Road Transport, Highways and Shipping
Government of India

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REPLY TO NITIN GADKARI'S LETTER BY PROF. G.D. AGRAWAL

Matri Sadan Kankhal, Hairdwar, Uttarakhand 4 July, 2018

Dear brother Nitin Gadkari ji,

I received your letter of 3 July brought by brother Dharia. With reference to that I have the following to say.

1. Ganga ji is special, not because the scriptures say so and she is respected in our tradition, or because according to moder thinking she like mother supports our upbringing in its basin and even takes care of our excreta but because quality of its water is exceptional, extraordinary. The generations before Independence knew

about the non-putrefying and disease curing quality of its remarkable water not only from tradition but from experience too. Post Independence rather than conducting research to ascertain these qualities and taking decision based on that, we just considered this as a myth and ignored it, treating it as any other water and started making plans for construction and exploitation. In support of my views I would like to quote some research as proof which have yielded some results:

- (a) My student Kashi Prasad at IIT Kanpur found in his M.Tech. dissertation in 1974-75 that in Ganga water taken from Bithoor, 20 kms upstream from Kanpur, there was amazing quality of destroying coliform which remained half at Water-Supply-Intak-Well. This quality was missing in the filtered water of Water Works or the ground water. Conclusion is that this quality is because of suspended micro-particles in the Ganga water.
- (b) In the research of D.S. Bhargava at IIT Kanpur for his Ph.D. during 1975-77 it was found that the water of Ganga at Hairdwar has tremendous ability to take care of Biological Oxygen Demand. The rate constant of decrease in BOD is 15-16 times that of normal. This is probably because of the Extra-Cellular Polymers from the Himalayan flora. However, at that time dam was not there.
- (c) A 2008-10 research of NEERI, Nagpur has found in the waters of Bhagirathi a combination of metals, radioactivity and nowhere to be found in the world Multispeci Coliphage. Because of these the water upstream of

Tehri dam has a unique Coliform destroying capability. But this settles down with the silt behind the dam and downstream water of Ganga doesn't have this property.

(d) As part of Dr. Mayilraj's research at IMBT, Chandigarh (CSIR) in 2016-17 Illumina Next seq-Sequencing pooled metagenomic DNA analysis of the silt showed that novel Phage Diversity was present in it which could destroy microbes of many diseases. He has listed 18 such varieties of microbes (which cause Tuberculosis, Typhoid, diseases related to stomach).

Do we have any right to view Ganga and Gangajal as any other river or river water?

2. You've talked about a number of projects in your letter. I believe that neither you nor any planner, scientist or engineer understands the importance of Ganga ji neither do they have have respect for Ganga ji so that they may consider her interest supreme, they just want to please their superiors. For example, in your letter of 30 June which you sent through Pranav ji you've mentioned about diversion of 80 MLD sewage from 140 MLD which flows in Seesamau drainage. I believe this sewer is pumped by the pump house. Hence 80 MLD is maximum capacity. What about 140 MLD? Is that the average flow of sewer? Is the flow on that particular day at that particular time when it was measured? I can confidently say based on experience that this is not the drain's maximum (at least over the last ten years) flow. If somebody was worried about Ganga he would have talked about the maximum flow.

- 3. Is it the responsibility of Ganga ji to clean the sewage, or not that of Municipal Corporation, Development Authority, Urban Development department of the government or the people who're creating it? Has the old mother been employed as a servant to the clean our sanitation waste by Smart phone bearing affluent youth and middle aged people? Why should the expense of such projects be borne by the Namami Gange?
- 4. I believe that the best alternative is to consider the National River Gangaji (Conservation and Management) Act 2012 for approval by our Parliament and then take up an action programme. I suggest that in the week of 9-16 July Modi ji, you, Ravishankar Prasad, Uma Bharti ji and other colleagues of your Cabinet who desire can meet with the team which prepared the draft (myself, Paritosh Tyagi, M.C. Mehta, Justice Giridhar Malviya, Justice (retd.) Kulshreshtha, Advocate Santosh Gupta, Govind Sharma) for two days to finalise the draft, table it in Parliament on 18 July and get it passed during 19-20 July. If the Bill is passed and Modi ji gives in writing that from now on all work related the Ganga ji will be done according to this Act, I'll end my fast.

Give priority by demonstrating the will power and commitment to Ganga ji. We don't pretense of faith, but commitment.

If you feel hurt by anything that I've said please remember it is because of the wrong policies and greed of economic development that we've landed in this situation. May God give right thought to you all.

Your brother, Gyanswaroop Sanand

APPENDIX V: COMMUNICATION IN 2018 BY PROF. GD AGRAWAL AND PM'S TWEET

AN OPEN LETTER TO THE PRIME MINISTER OF INDIA

Uttar Kashi, 24th February 2018 CE

My dear younger brother Narendra Modi,

May you attain the glory of having fulfilled the obligations to your mother, father and ancestors.

Brother, your becoming the Prime Minister happened much later, amongst the sons of Mā Gangā jī, I am 18 years older than you. Till the commencement of 2014 General Elections, you too spoke of being a sensible, understanding, beloved as well as a committed son of Mā Gangā jī — and having won those Elections with the blessings of our Mā (mother) and the grace of Lord Rama, now you seem to be trapped amidst a group of greedy, luxury-loving sons and daughters of our mother. In order to source the instruments of such luxurious living of these unworthy children (such as electricity in abundance), which you and your ilk call 'development', sometimes taking the shape of build-

ing waterways intending to turn the aged mother to a mule that carries the burden; and at other times, for the sake of fulfilling the needs of electricity, turned her into an enabler like oxen for plough or bulls meant for drawing carts/vehicles or a steer for a machines like pressers. A lot of blood of the mother is already being spent on maintaining a battalion of hungry, unworthy sons and daughters whose hunger never seems to end and they seem to have absolutely no care or concern for the deteriorating health of the mother. It is by the strength acquired from the blood of the mother that some of the members of your hang-men quartet have become heroes and their eye is always on the squeezing out of whatever blood left with the mother, no matter whether the mother survives or even succumbs. Your Constitution has granted these adults the right to reckon the mother, not as mother, but as property. Intelligent children, even as they are young and have not yet attained their adulthood, think about discharging their obligation of repayment of debt to the mother (matr rna utarna) as well as keeping the mother in good health as well in comfort and also explain to their unthinking brothers and sisters. These intelligent children can never ever think of burdening the mother, to hold her to plough, or machines like crushers to acquire such instruments that fulfil their selfish interests like their unthinking, unworthy, selfish brothers and sisters, leave alone thinking of sucking the blood out of the mother.

Being your elder brother, and also being elder to you in both education and intellect, and above all being someone who is ready to stake his all for the health-comforthappiness of Mā Gangā jī even before you have done so, in respect of issues relating to Gangā jī, I have the locus to explain to you and even have the right to give you directives in relation to the number of ailments, psychic and otherwise of the mother which do not get reduced because of your being crowned based both on your good fortune as well as on the strength of clever manoeuvring of popular pulse. It is with this right that I am presenting before you the following expectations for your action:

Expectation (A): Stop ALL the construction activities on the:

- (1) Vishnugad-Pipalkoti project that cuts asunder the Alakananda arm
- (2) Phata-Byung and Singoli-Bhatwari projects that cuts asunder the Mandakini arm

of *Tripathā* Mā Gangā jī and these remain completely stopped till:

(a) there be an extensive discussion followed by voteby-division method in the Parliament in respect of Expectation (B) and taking a decision keeping the interests beneficial(hita) to Mā Gangā jī in mind, and

(b) the receipt of consent of the Parishad formed as per **Expectation (C)**

Expectation (B): Your Government constituted a Committee under chairmanship of Justice (Retired) Giridhar Malviya for preparation of Draft Act for the protection as well as to rejuvenate the health of Mā Gangā

Jī about two years ago, and after the submission of the Draft Bill by the Committee, which without any delay should have been presented in the Parliament for discussion and passed, whoever has committed the crime of passing it into the cold storage, whether it is you and if not you, your unworthy colleagues or officers – they be dismissed and as an act of self-repentance, get the Bill passed and enforced. Let the Parliament not take up any other activity in Vikram Samvat. 2075 till the Draft Bill for Mā Gangā jī's protection is not passed and enforced – not even tributes or condolence motions or the Question Hour – nothing should be considered before the protection of Mā Gangā jī now.

Expectation (C): Within the State, a Gangā Bhakta Parishad be constituted which will have members from both the Government as well as Non-Government and each of who, upon taking their membership take an oath that at all times whether they think, talk or act will keep in mind the interests beneficial (hita) to Gangājī and whatever statement, suggestion, mention, consent or action will never be in a manner that causes even the minutest of harm even if it has minutest likelihood of occurrence. In respect of any construction or developmental activities on Gangājī, apart from it being in accordance with the law passed as per Expectation (B) but also must take the consent of Gangā Bhakta Parishad.

Having observed the priorities as well as the mode of action of you as well as your Government over the past three years and more, the possibility of my expectations being fulfilled within my lifetime are negligible and the unbearable pain caused because of the neglect of the interests beneficial to Mā Gangā jī has made my life itself unbearable – therefore, I have decided that with the above three expectations of mine remaining unfulfilled by Gangā Dussehra (22nd June 2018 CE), I will go on a fast unto death and with a prayer to the descendant of Mahārājā Bhagīratha — who brought Mā Gangā jī to earth — the all-powerful Lord Ram — that for the charges of having harmed the interests beneficial to Mā Gangā as well as having killed Gangā Bhakta elder brother, you be given appropriate punishment and with such a prayer, I will give my life up.

Your Mā Gangā Bhakta elder brother, Swami Gyan Swaroop Sanand (before samnyasa – Dr. G D Agrawal, former Professor, IIT Kanpur and former Member-Secretary CPCB, New Delhi)



SECOND OPEN LETTER WRITTEN TO THE PM

Matri Sadan, Kankhal District Haridwar, Uttarakhand

13 June 2018

Dear younger brother Narendra Modi,

I had written an open letter to you on 24 February, 2018 bringing to your attention: not only the complete denial of dire state of mother Ganga ji by your multi-layered government and various government organizations (like Namami Gange) but also a deliberate attempt to cause damage to mother Ganga ji as well as overall environment and nature, posted from Srinagar Garhwal post office by speed post. I'm enclosing a copy of the letter along with a copy of the speed post receipt for your reminder and as a proof.

I should have known, after 106 days over three and a half months, there is no acknowledgement, reply or any work in the interest of mother Ganga ji or environment (which may have benefitted them). Do you have time for the deplorable state of mother Ganga or consider the anguish of an old man like me?

Alright brother, why should I continue to bear the suffering. I will go on a continuous fast from Friday, the 22nd June, 2018 (the day Ganga appeared on earth) with a resolve to give up my life, condemning you and praying to Lord Ram that he should punish you sufficiently for having neglected the state of mother Ganga and for the murder of an elder brother. Although I don't expect you to have the time, but if because of the power of Ram ji, you feel like doing something for mother Ganga ji then the following are urgently needed for the health of the mother:

1. The draft Bill 2012 for Ganga ji proposed by Ganga Mahasabha (Advocate M.C. Mehta and Dr. Paritosh Tyagi

and I were involved in proposing it) should be discussed and approved by the Parliament. If this cannot be done then Chapter 1 of the above draft (Sections 1 to 9) could be issued as an Ordinance by the President.

- As part of the above all ongoing/proposed hydroelectric projects on Alakananda, Dhauli Ganga, Nandakini, Pindar and Mandakini should be immediately cancelled.
- 3. Immediate banning of deforestation, mining and any digging/dredging as part of Sections 4(D), 4(F) and 4(G) respectively, of the above-mentioned draft Bill, especially in the Haridwar Kumbh region.
- 4. As expected in the letter of 24 February, provisional (till June, 2019) constitution of Ganga Bhakt Parishad, to which you could nominate 20 members who ought to take an oath standing in the waters of Gangaji that they shall work for Ganga-ji and in the best interests of Ganga-ji only and in all matters relating to Ganga-ji, they will have the final word (You may not be able to take this oath as you're bound by the Constitution).

May God give you better sense and also the fruits of all your good/bad deeds. Mother Ganga ji may not spare you for ignoring her or betraying her..

Yours mother Ganga bhakt Elder brother (Swami Gyan Swaroop Sanand)
Before Sannyasa – Gurudas Agrawal (Professor, IIT
Kanpur)
Member-Secretary, Central Pollution Control Board,
New Delhi

...

THIRD LETTER WRITTEN TO PM

Matri Sadan, Jagjitpur Kanakhal, Haridwar Date: 05.08.2018 CE

In Your Service

Shri Narendra Bhai Modiji, Respected Prime Minister, Government of India, New Delhi.

Respected Prime Minister,

I have written a few letters to you in the past addressing matters related to Gangaji, but I have not received any response from you addressing them till now. I had a great confidence that after your becoming the Prime Minister you would think seriously about Gangaji because you have yourselves stated in the run up to 2014 elections in Banaras that you have come there because of the call given to you by Ma Gangaji — that very moment I came to believe that you would probably do

something worthwhile for Gangaji and it is on account of that belief that I kept waiting in peace for the past four and a half years. You would probably be aware that I have undertaken several fasts in the past seeking actions in favour of Gangaji and earlier accepting the grounds for my insistence ((sic) erstwhile Prime Minister Shri) Manmohan Singh ji decided to stop as well as cancel all activities in a major project like Lohari Nagpala which was already 90% complete by then, because of which the Government had to bear the brunt of the loss of thousands of crores rupees, yet the Government under Manmohan Singh ji went ahead and did this for the sake of Gangaji. Over and above this the then Government went ahead and declared the stretch of flow of Bhagirathi ji from Gangotri to Uttarkashi as an Eco-Sensitive Zone so as to ensure that activities that may cause harm to Gangaji never occur.

It was my expectation that you would go two steps forward and make special efforts for the sake of Gangaji because you went ahead and created a separate Ministry for all works relating to Gangaji, but in the past four years all actions undertaken by your Government have not at all been gainful to Gangaji and in Her place gains are to be seen only for the Corporate Sector and several business houses. Till now you have only thought on the point of earning profits from Gangaji. You do not seem to be giving anything to Gangaji, such is the impression created by all of your projects in relation to Gangaji. Even if for the sake of making a statement you may say that there is nothing to take from Gangaji but only give Her from our side.

On the 03.08.2018 CE, Union Minister Sadhvi Uma Bharti ji came to meet me. She made me speak to Nitin Gadkari ji on phone, but the response is expected from you. It is therefore that I could not give any reply to Sushri Uma Bharti ji. It is my request to you that you accept the following four desired requirements which remain the same as I have listed in my previous letter written to you dated 13th of June 2018, failing which I will give up my life continuing my fast. I have no qualms about giving up my life because the issue of Gangaji is very significant to me and is of utmost priority. I was a Professor at an IIT and was member of the Central Pollution Control Board as well as that of Governmental organizations related to Gangaji. It is on the basis of my experiences gained over all these years of being part of these institutions, I can state that in the previous four years of your Government, there is not even a single action that can be said to be a fruitful one in the direction of saving Gangaji. It is my request, I repeat, that the following necessary actions be accepted and acted on. I am sending this letter through Uma Bhartiji.

Here are my four requests for necessary actions:

1. Bring the Draft Bill prepared by Ganga Mahasabha in 2012 [Draft of National River Gangaji (Conservation andManagement) Act – 2012: http://www.gangamahasabha.org/gm%20docs/Draft%20Proposal %20%20of%20Ganga%20Mahasabha.pdf] for discussion in the Parliament immediately and get it passed (I, along with Advocate M.C. Mehta and Dr. Paritosh Tyagi

were part of the committee in preparing this draft). In the event that this does not happen, then from the above draft bill, items from Chapter-1 (from Article-1 to Article-9) be brought into force by way of an immediate Presidential Ordinance.

- 2. As a part of the above stated exercise, cancel all the hydel power projects that are under-construction over Alakananda, Dhauliganga, Nandakini, Pindar and Mandakini and also cancel all the proposed hydel power projects on Gangaji and all feeder streams of Gangaji.
- 3. From the draft Bill mentioned above, Article 4(D)-1 cutting/deforestation and 4 (F) slaughtering/processing of living species/matter and 4(G) all types of mining activities be completely stopped and this be enforced and this be specifically enforced in Haridwar Kumbha-Kshetra.
- 4. Constitute a Ganga Bhakta Parishad provisionally (till June 2019 CE) in which there will be 20 members nominated by you, who are to take an oath standing in the waters of Gangaji that they will act only in the interests benefitting Gangaji and only Gangaji's favourable interests and in relation to all actions pertaining to Gangaji, the opinion of this Parishad be taken as decisive.

Since I did not receive any response or reaction from you for my letter dated 13th June 2018, I have started my fast as stated in the letter from 22nd June 2018 and in that light, this is for your appropriate action quickly as well as with due thanks for the same.

Swami Gyan Swaroop Sanand (formerly Prof. G.D. Agrawal)



FINAL LETTER WRITTEN TO PM

Matri Sadan, Jagjitpur Kanakhal, Haridwar, Uttarakhand Dated 30 September 2018

To: Shri Narendra Bhai Modi, Honourable Prime Minister, Government of India, New Delhi.

Subject: My fast-unto-death since 22 June to put pressure on the Union Government to address the current decrepit state of Mother Ganga ji and to take urgent steps to ensure Aviralta, flow and quality of water, sediment and biodiversity.

Respected Prime Minister,

Today I've completed 101 days of the fast mentioned in the subject. I had sent you a letter stating my expectations on 24 February, 2018, but when I was totally disappointed with the Ganga Ministry/Namami Gange of Central Government I decided to undertake a fast-untodeath since 22 June, 2018. Neither receiving any reply, nor seeing any change in the ground level situation in implementation I sent you another letter on 13 June, 2018 stating my expectations again as well as informing you about my decision to go on fast-unto-death from 22 June. Again there was no reply, nor any change in ground reality. According to plan I started my fast on 22 June and informed you on 23 June, 2018 by a letter.

When you delivered your speech as a candidate for the 2014 Lok Sabha elections from Varanasi you said Mother Ganga had called you there, and you didn't want anything from her, you had come to serve her. I thought that you also consider her your mother from your heart (which I do and have been trying since 2008 to the best of my ability to restore its Aviralta, pristine flow and qualities) and because of your relationship with her and you being 18 years younger to me, you were my younger brother. Hence I wrote the first three letters to you considering you my younger brother. It dawned upon me towards end of July that even though she may summoned you with affection, got you elected and got the position of Prime Minister to you but now in the tussle for political power (any maybe its arrogance) you may not remember your mother and if you don't remember your mother, where is the question of considering anybody your brother. It is possible that my letter may not have reached you, they may have gotten entangled in the bureaucracy. Hence I sent you another letter on 5th August, 2018 addressed to you as Prime Minister and not as younger brother and to ensure that it reaches you I sent a copy by hand through sister Umashree Bharti ji. I have come to know that it has reached you and has been shared with the cabinet of ministers too. But what is the result? Result is same as before. There is no meaningful initiative. The Ganga minister Gandkari ji doesn't understand Ganga ji and neither has any faith in her (he may pretend to have some devotion to her). He doesn't have time from creating network roads and he also has to ply goods ships in Ganga ji, even though for that Varanasi may have to be converted into a bay. Thousand of crores of rupees from Namami Gange will be used to build hundreds of Sweage Treatment Plants which will fetch crores of urban votes. What will Ganga ji be able to give?

As I've written in the first sentence this is my 101st day with lemon water. If the government wanted to do anything for Ganga ji, which for millenniums with her pristine qualities has benefitted the people with faith in Indian culture, then it had more than enough time. Hence I've decided that from Ashwin Shukl Pratipada (9th October, 2018) from midday after taking my last dip in Ganga and after accepting water for the last time I'll give up water too (through mouth, nose, drip, syringe or any other way) and wait for the end of my life (If anybody produces a proof of my demands related to Ganga ji having been fulfilled after 12 noon on 9th October, 2018 even then I'll not pay any attention). I wish Lord Ram will fulfil my vow so that I may reach Him and get the people who've ignored the interest of Ganga ji (who is also respected by Lord Ram) punished.

In His court I'll blame you personally for my murder – whether it is accepted or not.

May Lord Ram give you wisdom,

Truly faithful to Ganga ji Her son

(Swami Gyan Swaroop Sanand)

Dr. G.D. Agrawal before sanyasa. Professor and Head, Civil Engineering, IIT Kanpur Member-Secretary, Central Pollution Control Board

Copy to:

(1) Honourable President, President's House, New Delhi

(2) Honourable Chief Justice, Supreme Court, New Delhi

(3) Honourable Chief Justice, Uttarakhand High Court, Nainital

(4) Honourable Chairperson, National Green Tribunal, New Delhi

(5) Sh. Nitin Gadkari ji, Hon'ble Minister, Water Resources, River Development and Ganga Rejuvenation, Government of India, New Delhi

(6) Sushree Uma Bharti ji, Hon'ble Minister, Drinking Water and Sanitation, Government of India, New Delhi

(7) Hon'ble Minister, Environment, Forest and Climate Change, Government of India, New Delhi

(8) Hon'ble Governor, Uttarakhand, Dehradun

(9) Hon'ble Chief Minister, Government of Uttarakhand, Dehradun

- (10) Chief Secretary, Government of Uttarakhand, Dehradun
- (11) Director General of Police, Uttarakhand Police, Dehradun
- (12) Commissioner, Haridwar
- (13) Dsitrict Magistrate, Haridwar
- (14) Senior Superintendent of Police, Haridwar
- (15) Station Officer, Kankhal Police Station



PROFESSOR G.D. AGRAWAL'S LAST WRITTEN COMMUNICATION PRESS RELEASE

FROM: AIIMS, RISHIKESH

Oct 11, 2018: 06:45 A.M.

Yesterday (Oct 10, 2018) at around 1 P.M. Haridwar Administration forcibly lifted me from Matri Sadan and got me admitted to AIIMS Rishikesh. The doctors at AIIMS were very supportive of my cause and my Tapasya for conservation and rejuvenation of mother Gangaji. However as a professional institution for medical treatment, they said they had only 3 options: (i) forced feeding oral or nasal, (ii) forced IV, (iii) No hospitalization. Detailed tests and investigations revealed

critical shortage of Potassium in my blood (only 1.7 against min of 3.5) and initial setup of dehydration. On persuasion, I've agreed to accept potassium being administered to me both orally and 500 ml/day IV. I heartily thank AIIMS for their support to my Cause & Tapasya.

(Prof. G.D. Agrawal)

(Note: The original is a hand written letter. The handwriting of the man who had been fasting for 111 days is amazingly legible. It is also a surprise how he could succumb so soon after writing this.)

* * *

TWITTER MESSAGE OF NARENDRA MODI AFTER THE DEMISE OF PROF. G.D. AGRAWAL

Saddened by the demise of Shri GD Agrawal Ji. His passion towards learning, education, saving the environment, particularly Ganga cleaning will always be remembered. My condolences.

11/10/18, 20:36

(Note: This was the only response of Narendra Modi to Prof. G.D. Agrawal's fast and four letters written by him to PM, unfortunately it was too late. The question remains why did Narendra Modi not want to interact with alive Prof. G.D. Agrawal?)

APPENDIX VI: LETTER WRITTEN BY SWAMI NIGMANAND TO CHIEF JUSTICES

Matri Sadan Jagjitpur, Kankhal, Haridwar Uttarakhand-249408

Date: 19/2/2011

Let We Rishis Sustain Awakening in the Country

To:

1. The Hon'ble Chief Justice The Hon'ble Supreme Court of India New Delhi

2. The Hon'ble Chief Justice The Hon'ble High Court of Uttarakhand Nainital

Subject: Insensitivity of some judges of the Hon'ble Superior Courts.

Hon'ble Sir,

Matri Sadan is a divine organization, which works for the protection and preservation of environment and removal of corruption.

1. Today is the 23rd day (since Jan 28, 2011) of Satyagrah by Brahmachari Yajnanand in the form of continuous fast, in the serene premises of Matri Sadan, to keep the dignity of the judiciary intact.

- 2. Recent developments indicate that darkness is too intense because on the one hand everything is being done in violation of rules and regulations whereas on the other hand there are a few people who honour the truth. As we had written earlier to both of you in our letter no. MS/2K11/Hdr/33 dated 14-02-2011, when a lawyer becomes a judge he should not be biased in his views but should uphold truth.
- 3. Even at the time of Satyagrah Judges, against whom we had moved an application, are hearing and deciding the case. Application to change the court are not accepted before the date of hearing, faxed applications are not properly considered and instead are thrown into dustbin. Even in the court room our application in not entertained. These events show how much insensitivity is there in our respected judicial system. Special Appeal is being made, but the principles of special appeal are not followed, rather it is suppressed. Insensitivity is of such nature that even after Satyagrah no direct conversation is taking place, rather things are being communicated in an indirect manner and even respected and responsible persons are denying their own words.
- 4. Satyameva Jayate (only the truth prevails) is written everywhere, but there is complete absence of truth. Statue and photograph of Mahatma Gandhi Ji are everywhere within and beyond the courtroom, conveying a message that as he followed the truth, so should

everybody. Since the darkness is too intense to cope up with and Vedas and Shrutis preach to do Tapas to liberate from such gloomy circumstances, therefore, I, Swami Nigmanand Saraswati, being senior most of all Sanyasi disciples, am making a request to Brahmachari Yajnanand Ji to end his continuous fast, which is in progress since Jan 28, 2011, and give me an opportunity to carry further the Satyagrah and make a holy sacrifice to remove corruption and restore the higher dignity, honour and sanctity of the judiciary.

- 5. Many people including some judges had started saying that a young sanyasi was made to go on indefinite fast. In the light of these comments, I, the senior most sanyasi, consider it my duty to present myself first when the moment of sacrifice comes.
- 6. People are losing capacity to hear and bear the truth. Executive branch of the government is facing serious allegations of corruption and judiciary is no exception to this. So, a holy sacrifice is needed and I, Swami Nigmanand Saraswati, am presenting myself for this aforesaid virtuous purpose and I am going to start Satyagrah in the form of continuous fast since afternoon of this day, i.e., 19 February, 2011.

With due regards,

Yours Sincerely,

(Swami Nigmanand Saraswati)

Matri Sadan, Haridwar

Copy to: for information

1. DM, Haridwar

2. SP, Haridwar

Note: Attention to DM

Your office creates problems in accepting fax and all our faxes are sent to Shri Gyanesh Agrawal.

APPENDIX VII: STRONG INDICT-MENT OF MODI GOVERNMENT BY SWAMI SHIVANAND

ON PROF. AGRAWAL'S 108th DAY OF FAST AND A DAY BEFORE HE GAVE UP WATER

Press Release

Dated: 8/10/2018

Got to read an article written by Modi-ji. The article was indeed very beautiful. It has quoted a mantra from Bhūmi Sūkta of Atharva Veda.

यस्यां समुद्र उत सिन्धुरापो यस्यामन्नं कृष्टयः संबभूवुः । यस्यामिदं जिन्दति प्राणदेजत् सा नो भूमिः पूर्वपेय दधातु ॥ अथर्व12.1.3

yasyām samudra uta sindhurāpo yasyāmannam kṛṣṭayaḥ sambabhūvuḥ | yasyāmidaṃ jinvati prāṇadejat sā no bhūmiḥ pūrvapeye dadhātu || atharva 12.1.3

That is, 'May we be given that earth: which has sea, river, water; in which food is possible through agriculture; where the active life is satisfied; in which the tasteful waters that were drunk since yore be available.'

Every mantra of Veda has a Rishi - the seer who revealed it to the world, has a corresponding Devata, it is in some Chhand and it is put to use for some purpose. Now the Rishi, Devata and Chhand are known but what is the purpose to which Modi ji is using this? These days, writers make use of mantras for the following three purposes-

1. to demonstrate their intellectual ability by indicating that I too am knowledgeable of Vedas

2. to understand the truths conveyed by the mantra-s

3. to live according to the proper form of life conveyed in the mantra

Modi ji has nothing to do with the second and third purpose. All rivers and waters are getting polluted, the ambrosia at the source of rivers is being converted to poison and to promote the interest of corporates, bottled water has been made available to quench people's thirst. It appears that poor people, animals, birds and aquatic beings has no right to get potable water. What to talk of any other river, by building dams on ambrosia like Ganga and then by plying ships in it Ganga is being destroyed. There are no rivers in India now, for only the one which starts dancing from its sources, touching the two sides, remains in contact with earth and atmosphere and reaches its destination in harmony is called river. This principle is enunciated in the 9th mantra of Bhumi Sukta which Modi ji has referred to

यस्यामापः परिचराः समानीरहोरात्रे अप्रमादं क्षरन्ति ।सा नो भूमिर्भृरिधारा पयो दुहामथो उक्षतु वर्चसा ॥ अथर्व12.1.9 yasyāmāpaḥ paricarāḥ samānīrahorātre apramādaṃ kṣaranti | sā no bhūmirbhūridhārā payo duhāmatho ukṣatu varcasā ||atharva 12.1.9

The rishis pray that a land which has plenty and aviral stream on all four sides give us meaningful fruit which is like milk and we radiate with intelligence (in the scientific language what Prof. Agrawala refers to as latitudinal, longitudinal, vertical and temporal connectivity).

The question is whether the first or the third is the purpose of Modi ji's Bhumi Sukta?

It is in the spirit of this Sukta that 87 years old rishi Swami Gyan Swaroop Sanand is sitting on fast for 108 days giving up food grains who wants to bring the Amrit like Ganga back to its original form and Modi ji and his Water Resources, Shipping, Transport and Ganga Minister, who is not aware of the glory of Ganga ji and neither has any faith in Ganga ji, are bent upon destroying Ganga ji assuming her to be their property. In this manner all rivers will disappear from India and children of India will have to go abroad to see and study rivers. In any case Modi ji is enamoured by foreign countries, doesn't have anything to do with Swadeshi and that is why he wants to convert a cultural city like Varanasi to Kyoto.

Modi ji, please be aware in time, only two days are left before Swami Sanand will give up water from the afternoon of 9th October and then it'll be difficult to save his life, this will be an indelible blot on you. You know that in 2011 your Uttarkhand government whose Chief Minister was Ramesh Pokhariyal Nishank, took the sacrifice of saint Swami Nigmanand Saraswati associated with Matri Sadan (or in clear terms became an instrument for his murder).

After Swami Sanand departs for holy destination, I'll sit on tapasya and after my demise the sequence will continue....

Let me remind you of the word given to Ganga ji by Bhagirath,

साधवो न्यासिनः शान्ता ब्रह्मिष्ठा लोकपावनाः । हरन्त्यघं तेंऽगसंगात् तेष्वास्ते ह्यघभिद्हरिः ॥ श्रीमद्रागवत **9.9.6**

Sādhavo nyāsinaḥ śāntā brahmiṣṭhā lokapāvanāḥ harantyaghaṃ teṃ'gasaṃgāt teṣvāste hyaghabhidhariḥ

'The saints who have risen above their worldly senses, who have attained, who are for the upliftment of people will relieve you of your sins as the God who pierces the sin sits in their hearts.' Matri Sadan and Swami Sanand are fulfilling this promise given by Bhagirath.

Swami Shivanand

Matri Sadan Ashram, Haridwar

Reference:

[1] https://greenmesg.org/stotras/bhoomi/bhoomi_ sukta.php

APPENDIX VIII: LETTER WRITTEN BY BRAHMACHARI AATMABODHANAND

Matri Sadan

Jagjeetpur, Kankhal, Hardwar, Uttarakhand (India) – 249408

Mail: matrisadan@yahoo.com, matrisadan@hot-

mail.com

Website: www.matrisadan.org

21-10-2018

Sri Narendra Modi ji Honourable Prime Minister, Govt. Of India Prime Minister's Secretariat, New Delhi

Subject: My and Saint Gopaldas's declaration of tapasya in continuation with the demise of martyrs Swami Nigamanand Saraswati, Baba Nagnath and now Gyanswaroop Sanand (Dr. G.D. Agrawal) in the service of Mother Ganga.

Respected Prime Minister ji, Mother Ganga is the flow of identity, culture and the civilization of our country. This is a priceless and heavenly spiritual heritage for the whole of humanity, which has become the victim of man's consumption-centric development policy lead-

ing it to a torn and devastated state. When as a result of raja Bhagirath's penance Gangaji was about to descend to the earth, she asked Bhagirath that people will cast off their sins into me, then who will liberate me from those sins? Then Bhagirath promised her that –

साधवो न्यासिनः शान्ता ब्रह्मिष्ठा लोकपावनाः । हरन्त्यघं तेंऽगसंगात् तेष्वास्ते ह्यघभिद्हरिः ॥ श्रीमद्रागवत **9.9.6**

Sādhavo nyāsinah śāntā brahmiṣṭhā lokapāvanāḥ harantyaghaṃ teṃ'gasaṃgāt teṣvāste hyaghabhidhariḥ

Meaning, Sanyasis - who have left this world, who, being away from this world, have attained the state of peace and are contemplating the Brahman, who purify the worlds by doing good to others - will take away your sins by bathing in you and by sacrificing themselves. This is so because in their hearts dwells God who can take away the sins.

Bhagirath engaged in great penance for mother Ganga, so this promise of his comes alive on its own in the hearts of us, saints, when we see that mother Ganga is in distress. This devastation of the mother may not be visible to your policy-makers whose view is limited by the greed of vested economic interest and they are making the mistake of seeing our actions merely as some flow of our personal emotions. But if you have some inkling of Indian culture and sage-tradition then you will know that our pain represents the larger pain

caused by the demonic development upsetting the five basic constituents and thereof deepening environmental crisis in the world. Such pain also represents the concern for the fall of human consciousness and as a result rises of adharma, crime and the ubiquitous corruption which have resulted due to development policies bereft of any ideals. We are pained by the fact that you have seen mother Ganga as only a water-resource and have opened the gates for all kinds of business ventures which trample her in every possible way in the name of development. Please take serious cognizance of the pain so clearly visible in the letters addressed to you by Swami Sanand ji.

Had you understood the genuineness of this pain, you would not have appointed a Ganga minister who thought of the sacred waters of Ganga (Gangajal) as a source of making money from a marketing point of view. How could such a person understand the sensitivity underlying Swami Sanand's pain and demand relating to the mother Ganga? Therefore, when your Ganga minister gave the patently false and baseless statement that Swami Sanand's demands have been accepted, the pain in his (Swami Sanand's) heart deepened seeing such false and insensitive behaviour. Matri Sadan, Haridwar, Waterman Rajendra Singh and his followers were immediately asked by him to expose this falsehood and he himself exposed this falsehood in detail, lying on the bed of the hospital, one hour before his death. He got it video recorded by his assistant. Did the government propagate this falsehood with the intention that Sanand ji would have departed from this world without knowing about this falsehood and in this way Sanand and his determination both would get buried???

Can you understand that the root cause of our, saints' pain is an extreme expression resulting from your consumption-centric development. Man is bent upon destroying everything for consumerism. Living creatures, environment, culture - are all being sacrificed at the altar of consumption-centric development, and if your government also adopts the same atheistic policy and point of view, then how will it understand our pain? Our culture teaches us co-existence and that everything is an expression of bramha is taught as the ideal, which instils in us the knowledge of the limits that we ought not to transgress. From the point of view of your "development" all movable and immovable world is merely a resource for human consumption, your government calls itself nationalist, but the idea of development and the spectacles it has worn are "Western". Therefore, your development-view sees nothing as sacred, pure but in everything market, economic value and scope for making money. It is because of this perverse and sinful behaviour towards mother Ganga in the name of development, we saints take to our heart the above quoted promise made by Bhagirath, which is compelling us to offer ourselves in sacrifice. What kind of "development" is this? Is this being with everyone (co-existence)? Is this development of each (water, environment, forest, fields and grains, wildlife, the five basic constituents and the spirit)? Or is it "destruction"!!!

We learned that people in your government disregarded Swami Sanand's demands, that were dedicated to mother Ganga, saying that it was "one man's stubbornness". It is very unfortunate that in a democracy, a government dilutes the seriousness of such an issue and behaves like an arrogant king. It is unfortunate for our democracy that Swami Sanand was not seen as the representative of Ganga but as an enemy of the government and merely ignored as "a person."

In 2011, Saint Swami Nigamanand of Matri Sadan sacrificed himself to free Ganga from the horrors of mining in the Kumbh township of Haridwar. In 2014, Baba Naagnath fasted at the Manikarnika Ghat of Varanasi for long, for undisturbed flow (aviral) of Ganga, and he left for good his highly weakened body due to the fast. This did not even become a matter of debate and discussion in the country. After this for four years your government was not sensitive towards doing something serious and concrete in relation to Ganga, instead in this period of your government quick steps were taken to destroy the environment in the Himalayas from where Ganga springs. You ignored the lessons of the disaster in June 2013. Hurt by such insensitivity, when Swami Sanand announced his intention to sit on fast from 22nd June, around the same time, saint Gopaldas too in his travels to Badrinath saw the destruction of the Himalayan environment in the Ganga valley. The construction of dams and the Chardham (four main centers of pilgrimage) project caused felling of thousands of trees and destruction

of vegetation, breaking and falling away of hill-slopes, the rioting by heavy machines in the upper reaches of Himalayas where Ganga springs and the marketization of the God's land (devbhoomi), which led to such pain and suffering for Gopaldas that he started his fast on 24th June at the feet of God Badrinath. From there, the administration moved him to Joshimath, Chamoli and finally to AIIMS, Rishikesh. From then on his fast continued in Rishikesh. After Swami Sanand's soul departed, Saint Gopaldas continued his fast in continuation with the demands made by Sanand ji at the same place in Matri Sadan and stopped taking water. Strange as it may seem, the government, instead of trying to find a solution, forcibly removed saint Gopaldas away from Uttarakhand.

At this point, I wish to tell you that when the government did not come out of its slumber even after the sacrifices for Ganga of Sawmi Nigamanand and Baba Naagnath, then Swami Sanand ji also departed forever. Matri Sadan had promised Swami Saanand that if his penance takes his life before the desired end, then Matri Sadan will continue the penance started by him for his commitment to mother Ganga. Since Saint Gopaldas has stopped taking water and he has been forcibly removed from here and sent outside, therefore you may please note that, in continuation of Swami Sanand ji's penance, I shall start my Ganga-Tapasya (fast unto death) on 24/10/2018.

We ought not to take anything from Ganga now, but we must give to it, if you are steadfast on this sentiment

expressed by you, then you will immediately attend to Ganga, otherwise if the assault of your market continues on mother Ganga in the name of development, then for resolution of the issue I will be forced to choose the path of sacrifice.

I have full hope that you will appoint advisors who have the knowledge of the concept of development in Indian context and yourself assume the command in this matter. You may kindly offer your tribute to Swami Sanand on behalf of the whole nation by taking cognizance of the four demands of Swami Sanand ji and immediately stop the proposed as well as underconstruction projects of dams on Ganga ji and all her tributaries and stop the mining in the bed of Gangaji in the Kumbh township, Haridwar. There is no reason to not act on these two demands of his. After this, the Ganga Act amended by him may be placed in the parliament and have dialogue with Matri Sadan and the associated Ganga-family on the council of devotees (bhaktparishad) to take the work forward with a defined timelimit. In expectation of a quick sensitive response from you.

On penance (tapasya) in continuity with the tradition of sacrifice by saints.

Brahmachaari Aatmabodhaanand, Matri Sadan, Haridwar

Copies to:

(Persons who contacted Swami Sanand ji)

Srimaan Nitin Gadkari ji, Minister, Water-resource, New Delhi

Sushri Uma Bharati, Minister, Drinking Water and Sanitation, New Delhi

Shri Ramesh Pokhariyaal Nishank, former Chief Minister, Uttarakhand

Shri Mohan Bhagawat ji, Sar Sangh Chaalak, via Shri Krishna Gopal ji, Rashtriya Swayamsevak Sangh

APPENDIX IX: EXCHANGE OF COMMUNICATION WITH DG, NMCG

LETTER ISSUED BY DG, NMCG THE DAY PROF. G.D. AGRAWAL GAVE UP WATER

National Mission for Clean Ganga 9th October 2018 To, The District Magistrate Haridwar

Sub: Directions under section 5 under The Environmental (Protection) Act, 1986 for regulation of mining activities – reg.

Whereas, National Mission for Clean Ganga (NMCG) has been constituted as an authority by MoWR, RD & GR, vide notification no. S.O. 3187(E), dated 7th October, 2016 (herein after called Authorities Order, 2016) under the provision of The Environment (Protection) Act, (hereafter called Act) to exercise powers and functions conferred under the said notification, in relation to River Ganga and matters connected therewith.

Whereas, para 39 of the above said notification provides functions of the NMCG and amongst other

(Clause C) of the said para stipulates that NMCG shall identify or cause to be identified for the specific areas where such remedial actions are required to be taken for rejuvenation and protection of River Ganga and its tributaries, and

Whereas, it has been reported that mining of minor minerals are being undertaken/carried out on river bed of river Ganga in village Dhobighat, Misserpur, Ajeetpur, Bishanpur, Sajjanpur Pilli, Raigarh Aithal and Raigarh Mustkan in Haridwar, Uttarakhand by M/s. Garhwal Mandal Vikas Nigam Limited, Uttarakhand, which inter-alia raised the concern of pollution of river water due to movement of trucks and tractors and consequently impacting the ecosystem of river bed directly or indirectly.

Whereas in compliance to the judgement of Hon'ble National Green Tribunal in the matter OA no. 10/2015, Government of Uttarakhand had issued direction vide letter no. 962/gre0.tribunal/bhu0khani0e0/2015-16 dt. 02 February 2016, to all District Magistrate, Managing Director – Garhwal Mandal Vikash Nigam; Managing Director, Uttarakhand Vaan Vikash Nigam and Managing Director, - Kumoou Mandal Vikash Nigam to comply with the following provisions:

a. The river bed mining shall be carried on in a highly regulated manner and under strict supervision of the authorities concerned b. No mechanized river bed mining would be permitted. No JCBs would be permitted to operate in the river bed

c. No suction of the minerals from the river and the river bed would be permitted by the mechanical process like suction pumps etc.

d. The regulated mining would include the seasons during which such mining is permitted and which shall be strictly adhered to

Whereas para 41(2)(m) read with clause (3) of para 41 of the Authorities Order, 2016, empowers NMCG to direct any person or authority to take such measures which may be necessary for prevention, control and abatement of pollution, rejuvenation and protection and management in the river Ganga and its tributaries Whereas, considering the investigation reports of MoEF&CC and Hon'ble NGT order dated 15 April 2015 in the matter of OA 117 of 2015, Central Pollution Control Board has issued direction under section 5 of the Act vide letter no. PCI-SSI/Direction-DM/SSP, Haridwar/2016 dated 6 December 2016, to Principal Secretary – Industrial Development; District Magistrate, Haridwar and Senior Superintendent of Police, Haridwar to comply with the following directions:

(i) District Magistrate, Haridwar and Senior Superintendent of Police, Haridwar shall ensure that the decision of Uttarakhand Government banning mining in Raiwala-to-Bhogpur stretch of Ganga River in Haridwar is strictly complied and no illegal mining takes place in this stretch of Ganga River.

- (ii) In view of the required action needed to stop illegal mining communicated by District Magistrate, Haridwar in letter dated 16.2.2016, Principal Secretary Industrial Development, Government of Uttarakhand shall issue necessary orders immediately for closure of operation of stone crucher/pulveriser as applicable along the banks of Ganga River in Raiwala-to-Bhogpur stretch in Haridwar.
- (iii) On issuance of necessary orders from State Government, District Magistrate, Haridwar and Senior Superintendent of Police, Haridwar shall immediately ensure closure of stone crushers/pulverisers as aforesaid in direction (ii) above.

Now, therefore, in view of the above and in exercise of powers vested to NMCG under para 8 of the Authorities Order, 2016, it is directed to comply with the following directions:

Ensure that the decision of Uttarakhand Government banning mining in Raiwala-to-Bhogpur stretch of River Ganga in Haridwar is strictly complied and no illegal mining takes place in this stretch of River Ganga within the provision of judgement of Hon'ble NGT in the matter OA no.10/2015 dt 15 April 2015

District Magistrate, Haridwar shall issue necessary orders immediately and ensure compliance of the order for closure of operation of stone crushers/pulverisers, as applicable along the banks of Ganga in Raiwala to Bhogpur stretch in Haridwar.

 Submit the compliance status of the direction issued in paragraph 2 above to NMCG or quarterly basis.

(Rajiv Ranjan Mishra) Director General

Copy to:

1. The Chief Secretary, Uttarakhand- For information please

2. The Secretary MoWR, RD& GR, GoICum Chairman, Principal Committee-For information please

The Project Director, SMCG – Uttarakhand- For necessary follow up and submission of independent compliance status report to NMCG



LETTER ISSUED BY DG, NMCG DURING BRAHMCHARI AATMABODHANAND'S FAST

National Mission for Clean Ganga

Dated: 26th April, 2019

FileNo: T-02/2016-17/450/NMCG/Misc.

To, District Magistrate Haridwar Sub: NMCG's directions under Section 5 of the Environment (Protection) Act, 1986 – reg.

Ref: 1. Director General, NMCG letter dt. 09.10.2018

 CPCB/IPC-II/directions/DM/SSP, Haridwar/2016 dated 23.04.2019

Directions under section 5 of the Environment Protection Act, 1986 were issued for regulating mining activities vide ref. 1 cited. The main operative part of the directions reads as under.

I. "Ensure that the decision of Uttarakhand Government banning mining in Riwala – to Bhogpur stretch of River Ganga in Haridwar is strictly complied and no illegal mining takes place in this stretch of River Ganga within the provision of judgement of Hon'ble NGT in the matter OA no. 10/2015 dt 15 April 2015.

II. District Magistrate, Haridwar shall issue necessary orders immediately and ensure compliance of the order for closure of operation of stone crushers/pulverisers, as applicable along the banks of Ganga in Raiwala to Bhogpur stretch in Haridwar.

III. Submit the compliance status of the direction issued in paragraph 2 above to NMCG on quarterly basis."

It is regretted to note that compliance staus as required vide sub para III above has not been received by NMCG so far from the district administration.

- 3. Since many complaints continued to be raised on the subject cited, CPCB convened a meeting of the complainants and Uttarakhand Government on 21.12.2018 in CPCB Headquarter, in which Uttarakhand Government failed to represent. Later, after obtaining the views of Uttarakhand Government, CPCB finally issued directions dated 23.04.2019 vide ref. 2 cited above, in which clear directions have been issued for enquiring into the complaint dt. 19.04.2019 filed by the Matri Sadan and submit the factual reports to NMCG and CPCB by 10.05.2019. CPCB has also directed the State Government to ensure strict vigil against illegal activities and take immediate action against the violators and to ensure that the directions of NMCG dated 9.10.2018 are strictly complied with.
- 4. NMCG reiterates its directions as contained in ref. dated 9.10.2018 cited 1 above and directs District Magistrate, Haridwar to prevent illegal mining and bring to book violators of provisions laid down by CPCB and NMCG from time to time and to take following specific actions forthwith:
 - Submit Report as required in ref 1, latest by 1st May 2019. The Report should include specific details of all inspections carried out to prevent illegal mining and results thereof in the last 6 months;
 - Clearly identify mining activities, if any, taking place beyond the permitted areas and take urgent suitable action;
 - Conduct surprise inspections by multi-disciplinary team of different enforcement agencies to prevent and check any case of illegal mining;

iv. Issue clear instructions to police to seize illegal material either on site or during transportation and bring to books the violators under appropriate provisions of law and send copy of such instructions;

v. All decisions taken in respect of sand mining or boulder crushing the area are to be put into the public domain including the websites of district administration by the

authorities concerned;

vi. Submit factual report by 10.05.2019 as per the directions of CPCB order dt. 23.04.2019 and;

- vii. Submit periodical reports on compliance status of directions in terms of NMCG's letter dated 9.10.2018 in ref. 1 above, on quarterly basis thereafter.
- 5. The enforcement and implementation of the directions mentioned here in above shall rest with the District Administration and the District Authorities concerned will be held liable for lapses therein, if any, and shall be dealt with strictly.
- 6. The receipt of this communication be acknowledged.

(Rajiv Ranjan Mishra) Director General

> Copy to: Chief Secretary, Government of Uttarakhand – for information with a request to issue necessary instructions.

Copy for information:

- Secretary, MoEF&CC
- Secretary, MoWR, RD&GR



DG, NMCG'S REQUEST FOR WITHDRAWAL OF BRAHMCHARI AATMABODHANAND FAST

National Mission for Clean Ganga Dated: 4 May, 2019

L. No. T-02/2016-17/450/NMCG/Misc.

To, Swami Shivanand Ji Matri Sadan Jagjeetpur, Haridwar Uttarakhand-249408

Respected Swami Ji,

Kindly recall the discussion during my visit to Matri Sadan on 25/4/2019.

2. As far as illegal mining activities are concerned, National Mission for Clean Ganga (NMCG) as well as Central Pollution Control Board (CPCB) have been issuing directions to the State Government and district administration from time to time and seeking compliance thereof. After our discussion on 25.4.2019 at Matri Sadan, fresh set of instructions have been issued to district administration, Haridwar on 26.4.2019 (Copy of the same is enclosed). Chariman, CPCB has also been requested vide our letter dated 26.4.2019 to constitute special teams for carrying out surprise inspections to ensure compliance of the directions of NMCG and CPCB. A copy of the letter addressed to Chairman CPCB is enclosed.

- 3. A special team deputed from CPCB has also carried out inspections in the concerned area. Chief Secretary, Uttrakhand has also been requested to ensure compliance of the directions issued to district administration, Haridwar vide our letter dated 29.4.2019 (copy enclosed).
- 4. As far as Hydro-electric projects in Uttrakhand are concerned, the issues related to the same have been deliberated at length with different stakeholders. Teams constituted by Ministry of Water Resources, River Development and Ganga Rejuvenation have also made spot visit and submitted their reports, based on the deliberations and inputs received from the spot visit, a decision relating to Hydro-electric projects in Uttrakhand is expected to be taken shortly.
- 5. The Central Government is committed to ensure Nirmalta and Aviralta of the holy river Ganga. The notification issued by NMCG regarding e-flow is a significant step towards ensuring Aviralta of River Ganga.

In view of the above, I would request you to kindly urge Swami Aatmabodhanand Ji to discontinue his fast and save his precious life.

Yours Sincerely,

(Rajiv Ranjan Mishra) Director General



SWAMI SHIVANAND'S REPLY TO DG, NMCG'S LETTER

Matri Sadan

Jagjeetpur, Kankhal, Haridwar Uttarakhand – 249408

05-05-2019

Ref No.: MS/2K19/Hdr/51

To Shri Rajiv Ranjan Mishra Ji, Director, NMCG, Govt. of India, New Delhi.

Subject: Regarding your sensitiveness towards Ganga Ji & the saints doing tapas for the same.

Mishra Ji,

God bless you,

Thanks to you for the sensitiveness shown by you towards Ganga Ji & the saints doing tapas for Ganga Ji. As per the discussion took place in Matri Sadan on 25-04-2019 you sent the letter dated 4th May, 2019 in writing as had been assured by you and I asked Brahmchari Aatmbodhanand to pause his fast. You & Shri G. Ashok Kumar Ji, Executive Director (Project) arrived in Matri Sadan on 25th April, 2019 discussed the issue at length and further did in the same line is no doubt appreciable. We also hope that you will take steps to initiate criminal proceedings against the District Magistrate Haridwar Shri Deepak Rawat for violation of your direction u/s/ 5 of the E(P), Act, 1986.

As far as the demand relating to dams are concerned the Govt. of India has already decided to scrap all proposed dams on Ganga Ji and its tributaries. As far as scrapping of four under construction dams are concerned it was amicably discussed with you that Phata-Byung has already been closed and the same must remain closed for ever, Tapovan-Vishnugad has been rejected by the WII, so now remain two dams Singoli-Bhatwadi & Vishnugad-Peepalkoti, though it is not on paper but it is a fact. Therefore expenses occurred on two dams Singoli-Bhatwadi and Vishnugad-Peepalkoti must not be considered in its scrapping. After all abovementioned four dams are dangerous for the Ganga Ji's uninterrupted flow and environment, therefore nothing is above Ganga Ji. Regarding on spot visits rest of the dams should be scrapped as per the report.

We hope we will soon hear the scrapping of abovementioned four projects also from the NMCG and this will give a new vision to rejuvenate Ganga Ji. Sacrifice of Swami Sanand Ji will also receive recognition in the country of Mahatma Gandhi, which till date remained unnoticed. I hope that the feelings of Brahmchari Aatmbodhanand must not be defeated saying which I asked him to pause his fasting.

With thanks, Swami Shivanand Matri Sadan, Haridwar

APPENDIX X: E-FLOWS RECOMMENDED BY IIT CONSORTIUM REPORT

Summary of Environmental Flows Assessment Results at Seven Selected Sites in Upper Ganga Segment (Source: IIT Consoritum Report)

Location	Mensoon A	Mensoon B	Non Moti-	Non More	Lean Flow A	Lem Flow II	Amraial A	Armuni 3
Resert, Dharima or- Rhagirathi River	46	-61	51	67	62	79	47	02
U/S Dev Prayag on Bhagirat Fi	35	67	31.	€0,	43	77	35	67
DVS Pasdra Freyng str Alakuanda River	40	-64	46	-0	48	71	42	4.5
DAS Dev Praying ou Sanga River	59	71	13	71	72	83	60	71
U/S Riefdheih un Gariga River	50	54	67	72	79	85	54	56
CWC Station Registests on Ganga	53	64	71	72	33	85	55	66
D/S Pastudok Barrage on Ganga	3.8	14	37	75	42	85	35	66

Monsoon: June 1 - October 20;

Non-Monsoon: October 21 - May 31; Lean Period: December 16 - March 15;

A: as % of Average Virgin Flow;

APPENDIX XII: UN TAKES NOTICE OF FASTS BY SAINTS

UN CALLS FOR INDIA TO CLEAN UP SEVERE POLLUTION IN THE GANGES SACRED RIVER

December 2, 2018, by Charlotte Pointing

The United Nations (UN) is urging the Indian government to clean up the Ganges river following the death of 86-year-old environmentalist activist Swami Gyan Swaroop Sanand. Sanand dies on the 111th day of his fast in protest against inaction on cleaning the river.

Worshipped as a God by Hindus, the Ganges flows through India and Bangladesh. According to the UN Environment it is both "incredibly sacred and exceedingly polluted."

Sanand devoted his life to the protection of the Ganges, which is ecologically dead in stretches that run for more than 600 km – calling upon the Government to enforce a "Ganga Protection Management Act" and to prevent illegal dams and mining from taking place in the river.

While the Government claimed that work was being done to reduce pollution in the Ganges – the Namami

Gange Project has spent around \$460 million since 2016 attempting to clean it – Sanand maintained that their efforts were not enough.

Waste continuously flows into the Ganges in various areas across the country. This is dew to malfunctioning sewage pumping systems, but also because some cities—such as Varanasi - do not have the capacity to deal with the 400 million litres of sewage generated every day.

But there is some hope for the environment in India; the nation's Prime Minister Narendra Modi received a Champions of the Earth award from the UN Environment for his fight against plastic pollution in the country and for his commitment in combating climate change. However, on the issue of Ganges, the UN maintains more needs to be done by Modi.

"Under Modi's leadership, Indian sustainable policy implementation and green grassroots initiative have flourished and the nation is now the fifth largest producer of solar energy and the sixth largest producer of renewable energy worldwide," notes the UN Environment.

It continues, "However, the Ganga River is still woefully polluted and efforts to clean it severely lacking. Despite the Uttarakhand High Court ordering the state government to ensure no untreated sewage being dumped in the Ganga, the practice is still widespread."

According to the UN, Sanand is not the first activist to lay down his life for the protection of the Ganges. In 2011, Swami Nigmanand Saraswati died on the 114th day of his fast for the same cause.

"UN Environment does not wish to see more environmental defenders die in an effort to clean up the Ganga," notes the organisation. "We urge Modi and his government to enact all activities and follow up on all promises to bring back life and health to this sacred river."

APPENDIX XII: IN SUPPORT OF SADHUS FASTING FOR CONSERVATION OF GANGA

SIGNATURE PETITION TO GOVERNMENT DURING PROF. AGRAWAL'S FAST

86 years old Swami Gyanswaroop Sanand, formerly known as Professor G.D. Agrawal, of Indian Institute of Technology, Kanpur and Member-Secretary Central Pollution Control Board, is on fast unto death at Haridwar since 22 June, 2018, demanding a law for conservation of river Ganga. He has played an important role in stalling 3 hydroelectric projects to ensure uninterrupted flow of Bhagirathi, which becomes Ganga after meeting Alaknanda, for the initial 175 kms.

Close to Rs. 500 crores was spent as part of the previous Ganga Action Plan and now Rs. 7,000 cr. Out of Rs. 20,000 cr., proposed budget for Namami Gange project under the current government, has been spent but most of industrial waste and sewage continues to flow untreated in Ganga similar to other rivers like Sabarmati in the country because, firstly, the installed capacity of Sewage Treatment Plants and Common Effluent Treatment Plants is woefully short of the total waste generated and, secondly, whatever capacity has been

built remains non-functional for various reasons, including corruption.

It is shocking that this government which projects itself as champion of Hindutva and changed the name of Water Resources Ministry to include Ganga Rejuvenation in its name is completely silent on Swami Gyan Swaroop Sanand's fast and the media is colluding in this conspicuous conspiracy.

We demand that the government enter into a dialogue with Swami Sanand to save his life and take some concrete steps to save the rivers and other water bodies of country.

Medha Patkar, Narmada Bachao Andolan, National Alliance of People's Movements

Swami Agnivesh, Bandhua Mukti Morcha, Delhi

Mallika Sarabhai, Activist and Classical Dancer, Ahmedabad

George Leitmann, Emeritus Professor, University of California, Berkeley (from where Prof. G.D. Agrawal did his Ph.D.)

P.R.K. Rao, former Professor, IIT, Kanpur and colleague of Prof. G.D. Agrawal, based in Hyderabad

C.V.R. Murti, former Professor, IIT, Kanpur and colleague of Prof. G.D. Agrawal

K.R. Srivathsan, former Professor, IIT, Kanpur

Giriraj Kishore, Padma Sri, Literary personality, former Registrar, IIT, Kanpur

Rahul Varman, Professor, IIT, Kanpur

Sandeeta Kohli, Professor, IIT, Delhi, earlier at IIT, Kanpur

Siddharth Ramachandran, Professor, Boston Univertiy

and IIT, Kanpuralumnus

Sanjeev Ghotge, IIT, Kanpur alumnus & former student of Prof. G.D. Agrawal

Sushil Handa, IIT, Kanpur alumnus & former student of Prof. G.D. Agrawal

C.V. Singh, IIT, Kanpur alumnus & former student of Prof. G.D. Agrawal

Pratap C Gupta, IIT, Kanpur alumnus, presently in Australia

Ram Puniyani, All India Secular Forum and former Professor, IIT, Mumbai

Udaya Bhanu Chitranshi, IIT, Roorkee

Dilip Kumar, Ph.D., IIT, BHU, Varanasi

Kavish Kumar, Student, IIT, Gandhinagar

Vishwesha Guttal, Indian Institute of Science, Bengaluru

Jyoti Jha, Student, IIIT, Hyderabad

Ghanshyam Shah, former Professor, JNU, University of Chicago, etc., based in Ahmedabad

Sunil Sahasrabudhey, Former Professor, Gandhian Institute of Studies, Varanasi

Prajit K. Basu, Professor, Department of Philosophy, University of Hyderabad

Prem Singh, Professor, Delhi University, New Delhi

AchinVanaik, Former Professor Delhi University, New Delhi

Mohan Bhagat, Emeritus Professor, University of Maryland, USA (Note: This appeal was carried to Swami Sanand at Matre Sadan, Haridwar by the author when he went to see him on his 62nd day of fast on 22 August, 2018.)

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Resolution adopted at a meeting called at Matri Sadan by Bharat Jhunjhunwala on 19-20 January, 2019 while Brahmachari Atmabodhanand was on fast

Drafted by Advocate P.S. Sharda

GANGA SANKALP

The pride of India, Ganga, a symbol of Ganga Yamuni culture, is in peril from its emergence in Himalaya to its immersion in the sea. Tied down by about 200 proposed and operational dams. Merger of Bhagirathi, Vishnupadiganga, Alaknanda at Devprayag forms the complete Ganga. The Dhauliganga, Nandakini, Pindar and Mandakini merge in Alaknanda at Vishnuprayag, Nandprayag, Karnaprayag and Rudraprayag, respectively.

At present like Tehri, Vishnuprayag and Srinagar kind of reservoir and tunnel dams have destroyed the natural form of Ganga. Today Ganga appears in lakes or has been tunnelled and the river bed is drying at such places. The river no more belongs to its people in the hills. The river's benevolence providing fish, sand, wood, etc. are taken. The uprooted people from dams

- Ensure that the free flow of river Ganga with all its sediments from Himalaya to the coast is not only restored but also not interfered with in future.
- Ensure that no new dam of Barrage is constructed on river Ganga and halted and removed if under construction anywhere on the path of free flow of the river in its pristine purity.
- All dams exsting on Ganga are decommissioned.
- Forthwith implement CPCB order dt. 6th Dec., 2016 issued vide letter no. PCI-SSI/direction-DM/SSP, Haridwar/2016 prohibiting mining and stone crushers within 5 km from either side of Ganga upto Raiwala 2, Bhogpur, Haridwar, up to Raighat and issue direction to halt.
- Demolish the following dams under construction on Ganga: Singoli-Bhatwari, Tapovan-Vishnugad and Vishnugad-Pipalkoti.
- Saints have and are sacrificing their lives in an unbroken chain of amaran Anshan at Matri Sadan. The concerned authorities must immediately engage with them to resolve their demands.

Issued this the 20th day of January, 2019, at Haridwar, Uttarakhand.

Contact: facebook: @freeganga, twitter: @matrisadan



ENVIRONMENTAL GROUPS AND CITIZENS WRITE TO PM TO TAKE URGENT ACTION ON GANGA

February 19, 2019

To:

1. Hon'ble Mr. Narendra Modi, Prime Minister of India, connect@mygov.nic.in narendramodi1234@gmail.com

2. Hon'ble Mr. Nitin Gandkari, Minister, Water Resources and Ganga Rejuvenation Ministry, Government of India. nitin.gadkari@nic.in

3. Hon'ble Mr. Trivendra Rawat Chief Minister, Uttarakhand cmuksampark@gmail.com

Subject: River Ganga

Respected Sirs,

There is no debating that Ganga must flow free or will perish will all attendant consequences. This is vindicated by Ravi Chopra Committee in its report to the Supreme Court submitting that there has been an increase in disasters in Uttarakhand ever since the tragedy in 2013, due to the presence of big dams. The Union of India under your government pledged to rejuvenate the Ganga including Alakhanda, Mandakini and Bhagirathi and all their tributaries.

Presently, four under-construction dams namely Tapovan-Vishnugad, Vishnugad-Pipalkoti, Singoli-Bhatwari and Phata-Byung are further threatening the survival of this river adding to the damage already done by a number of existing dams.

To save the River Ganga, Swami Saanand fasted for 111 days to draw your attention to River Ganga's cries for survival before he succumbed unheeded. Carrying on the baton, Sant Gopal Das fasted for 146 days when he disappeared under suspicious circumstances unheard and unheeded. Presently the 26 year old young Brahmachari Aatmabodhanand from Matri Sadan, Haridwar, has been on fast since 24th of October, 2018 determined to carry on the baton for a positive response on Ganga from your governments.

Your government must immediately engage with them ensuring that every step necessary to sustain the river is taken proactively without any further loss of life of those fasting for the River.

The Himalayas are geologically young mountains. The tunnels, dams and other parts of the hydropower projects being built have been destroying the river, its biodiversity and weakening the Himalaya mountains.

Landslides are on the rise. This can be seen at the existing hydropower projects at Vishnu Prayag, Srinagar, Maneri Bhali I and II, Tehri and Koteshwar. Further, the water of the River stagnates in the Tehri Reservoir and becomes dead without oxygen as established by the methane emissions recorded by the National Environment Engineering Research Institute.

The Government (NMCG, MoWR) notification of Oct 9, 2018 on Environmental flows (Eflows) is not based on any scientific assessment or credible time bound compliance or any vision of Ganga. The Eflows mentioned are only 6% of the flow at Haridwar and 3% at Narora. This is completely inadequate for any river, considering that the IIT Consortium has recommended about 50% Eflows from hydropower projects. In fact the March 2015 joint report from MoWR and MoEF provides the right methodology for arriving at environment flow requirements for any river and the Oct 9, 2018 notification is clearly a retrograde step in that context. The notification needs to be replaced by making a statutory requirement of following the March 2015 report mentioned above.

To save and rejuvenateGanga river please begin with:

 Stopping the following dams under construction on Ganga at Tapovan-Vishnugad on Dhauli Ganga, Vishnugad-Pipalkoti on Alaknanda, and Singoli-Bhatwari on Mandakini and cancel all under construction and planned hydropower projects on Ganga and its tributaries. Big hydropower projects are in any case not even economically viable now.

- Forthwith implementing the CPCB order dated December 06, 2016 issued vide letter no. PCI-SSI/direction-DM/SSP, Haridwar/2016 prohibiting mining and stone crushers within 5 km from either side of Ganga up to Raiwala 2, Bhogpur, Haridwar, up to Raighati and issue directions to halt.
- 3. All major interventions adversely affecting the river Ganga should require statutory social and environmental impact assessments, public consultations and appraisal. Major interventions now underway including Char Dham Highway, National Waterways, River Front Development, Dredging, and even mega hydropower projects (e.g., Lakhwar) in Ganga basin are today escaping this process for one reason or another.
- Saints have and are sacrificing their lives in an unbroken chain of amaran anshan at Matri Sadan. The concerned authorities must immediately engage with them to resolve the demands.

Your governments need to urgently intervene. Awaiting an early response, Sincerely, Sagar Rabari, President, Khedut Ekta Manch, (Gujarat) sagar 45 rabari@gmail.com

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FEET MARCH FROM DELHI TO HARIDWAR 9 MARCH TO 17 MARCH, 2019

Swami Gyan Swaroop Sanand who earlier served as Professor at Indian Institute of Technology, Kanpur and was the first member-secretary of Central Pollution Control Board began a fast unto death on 22 June, 2018 demanding a law for conservation of Ganga. After 112 days of fasting he died at All India Institute of Medical Sciences, Rishikesh because of alleged cardiac arrest on 11 October. He wrote letters to the Prime Minister before and after beginning his fast. However, Narendra Modi did not dialogue with him. He sent a condolence message on twitter the day Swami Sanand died. We hold Bhartiya Janata Party government and Narendra

Modi directly responsible for the murder of Swami Sanand.

In 2011 young ascetic Swami Nigmanand had died on 115th day of his fast in Haridwar against illegal mining in Ganga. It is alleged that he was murdered by a mining mafia who was close to the then BJP government in Uttarakhand. Swami Gokulanand who observed the first fast against illegal mining in 1998 with Swami Nigmanand was murdered in Nainital in 2003 by mining mafia. Baba Nagnath died on 114th day of his fast in Varanasi in his effort to save Ganga. Sant Gopal Das who started his fast for uninterrupted flow and clean Ganga on 24 June, 2018 has been missing from a Dehradun hospital since 6th December, 2018.

Swami Gyan Swaroop Sanand wanted Aviral or uninterrupted and Nirmal or clean Ganga. He was demanding that all proposed and under construction hydro power projects on Ganga be stopped immediately. He wanted complete ban on illegal sand and stone mining in Ganga basin as well as on deforestation. Presently another young ascetic Brahmachari Atmabodhanand has completed more than hunderd days of fast with the same demands continuing Swami Sanand's struggle. He is fasting is the same room which was used by Swami Sanand at Matri Sadan. Swami Punyanand is next in line already on fruit diet ready to go on fast if anything happens to Brahmachari Atmabodhanand.

Swami Sanand had fasted five times during Manmohan Singh's government in 2008, 2009, 2010, 2012 and

2013. That government stopped the Lohari Nagpala hydro power project and declared 135 kms. of Bhagirathi river as eco-sensitive zone on his demand. During his 2013 fast Rajnath Singh as then BJP president had sent him a letter that all his demands related to Ganga will be met when Naremdra Modi government will come to power. However, sitting once on fast in this government proved fatal for him.

If the government had agreed to Swami Sanand's demands not only him but Ganga would also have been saved. Now Swami Sanand is not amongst us and one day Ganga will also disappear. Many rivers in the country including Sabarmati have dried. Ganga and other rivers will also meet the same fate.

If the government had listened to saints then 40 % of Indian population who live on banks of Ganga or one of its tributaries would have directly benefitted. But as the elections approach issue of Ram Mandir in Ayodhya, from which nobody knows who'll benefit, is being raked up and in the case of Sabrimala temple RSS and BJP as well as Congress are opposing the entry of women into the temple. On the other hand all big parties are promoting corporate loot.

Neglecting the common people's issues like implementation of Allahabad High Court Justice Sudhir Agrawal's judgement making it compulsory for all persons receiving salaries from government to send their children to government schools, Justice Sudhir Agrawal and Justice Ajeet Kumar's judgement that all people receiving

salaries from government and their family members get themselves treated in government hospitals, bring an employment guarantee Act for the educated unemployed on the lines of Mahatma Gandhi National Rural Employment Guarantee Act or minimum support price for farmers there is an attempt to exploit religious sentiments of people and give free hand to corporates. We need to reject this politics.

Matri Sadan, Lok Rajniti Manch, Khudai Khidmatgar, National Alliance of People's Movements, Nodi Bachao Jibon Bachao Andolan (W. Bengal), Koshi Navnirman Manch (Bihar), Matu Jansangathan, Ganga Bachao Samiti, ToxicWatch Alliance, Sarva Dharma Samanvaya Parishad (Jharkhand), J.P. Health Research Foundation, Parents' Forum for Meaningful Learning, Sanatan Sanskriti Raksha Dal, Jal Jan Jodo, Paigam-e-Insaniyat, Prayatna, Humanity Welfare Society, Indian Industries Association, ECOLOGIZE, EGC Enterprises, Lok Shakti Abhiyan, Socialist Party (India)

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11/3/19, Mohiuddinpur, Partapur, Meerut, Devender Hoon, 8445224599, Naveen Quraishi, 7534000087 12/3/19, Daurala, Sakoti, Khatauli, Faizan, 9927777272 13/3/19, Mansurpur, Nara Jaroda, Muzaffarnagar, Hotilal, 9219185842, Asif Rahi, 9837068858 14/3/19, Chapar, Barla, Purkazi, Qamar Intekhab, 9990505438

15/3/19, Gurukual Narsan, Manglaur, Roorkee, Dr. Ashank, 8923117874, 7906134571, Shariq Afroz, 8755554467

16/3/19, Kaliyar, Bahadrabad, Jwalapur, Hema Bhandari, 9358017750, Anil Satti, 8979388277 17/3/19, Haridwar, Swami Dayanand, 9808725573, Swami Punyanand, 7253859684

	少	Who is Friend of the Ganga?		
3	Slow progress in Sewage Treatment till 2014.		0	Rapid action in Sewage Treatment after 2014.
8	Less water in Kumbh		3	More water released from Tehri Dam for Kumbh in 2019.

0	Environmental flows to be released for keeping the river alive increased from 15% to		3	Did not implement the recommen- dation of IIT Consortium to increase Environmental Flows to 35-51%.	
0	Assigned job of making Ganga River Basin Manage- ment Plan to IIT Consortium.	((a(a)))	(8)	Placed Report of IIT Consortium in cold storage.	
8	Continued to make new dams.		3	Decided not to make new dams on Ganga	
	CONGRESS		Ī	ВЈР	
0	3 Hydropower Projects on Bhagirathi cancelled due to tapasya of Swami Sanand.		8	Refused to cancel 3 Hydropower Pro- jects despite tapasya of Brahmachar- iAtmabodhanand.	
0	9 Environmentalists made members of National Ganga River Basin Authority		8	Environmentalists removed from Na- tional Ganga River Busin Authority.	
8	Construction of Tehri Dam started.		(S)	MurliManoharJoshi Committee gave green light to Tehri Dam.	

Provide your support here: https://www.freeganga.in/en/(sign letter)

Join on WhatsApp: 9012263087

APPENDIX XIII: GANGA-JI & HYDRO-ELECTRIC POWER DEVELOPMENT (VIKĀS IN CURRENT IMAGINATION)

[English Translation of the Article Collected from 86-year old Swami Gyan Swaroop Sanand (formerly Prof. G.D. Agrawala of IIT Kanpur & Member-Secretary Central Pollution Control Board) on the 50th day of his fast. This is the most comprehensive statement from Swami Gyan Swaroop Sanand as to why he is on a fast-unto-death for the sake of Ma Ganga – A Ganga Tapasya for him and A Call to Awaken the Cultural Conscience to the rest of those who care for Ma Ganga]

A Ganga-ji – Uniqueness, Importance & Greatness

A-1 Firstly, Ganga-ji is a stream (dhāra). The most important quality of a stream is that it flows. If there is no flow, then it is not a stream; it may be a lake, pond, johad (~tank) or a puddle -- any such thing, but never a stream. As on today -- 50-60 kilometres prior to Tehri Dam, 10-15 kilometres behind Srinagar-Alakananda Dam, as a matter of fact, even 2-3 kilometres before Maneri Dam or 1-1.5 kilometres before Uttarkashi-

Vishnuprayag Barrage – can neither be said to be a stream nor can it be called as Ganga-ji.

A-2 Fed by the Himalayan glaciers as well as the various waterfalls from atop the high Himalayan mountains, the flows of Ganga-ji are by nature perennial with waters throughout the year; they are not seasonal or dependent on rainfall. The flow increases or decreases; owing to the natural causes such as rainfall, heat snowfall; that is by way of giving adequate notice- not as a sudden occurrence; especially not on the basis of causes arising from human-desire or human-greed (like hydro-electric power generation where such things happen repeatedly).

A-3 Natural water streams, that include all those arising from mountainous headstreams/ waterfalls -rivers, brooks, streams (gad, like Manerigad) - have one unique property, which is to be in continuous connect on all sides of the place where they flow from: the atmosphere above as well as being in contact with the bed (at the bottom) and the two banks on either side of the flow. They are in continuous exchange of properties in the process. At some places, waters join the stream either from the bed or either or two of the earth which is on the banks, whereas at other places, the waters in the stream gets seeped into the earth on any or a combination of the three sides. At some places, parts of the bed or the earth on either side of the stream may get cut into pieces and get mixed with the waters of the stream, whereas at other places, parts brought by the stream may get separated and get deposited at the

bottom of the stream (bed) or in any or both the sides of the stream. Whereas at some places the gases from the atmosphere like oxygen, carbon dioxide, nitrogen oxide, sulphur oxide etc., get washed in the water and get dissolved, and at the same time those gases that are released by the aquatic life get mixed into the atmosphere. If anyone attempts to cover the waters with a roof over it resulting in cutting it off from the atmosphere, or if one were to make the bottom of the river waters flow through concrete (such as in a tunnel) or if either one or both the sides of the river - a concrete embankment is built in such a way as to cut it off from the place by which it flows, then it no longer remains a natural river. These three necessary properties of a natural river are called open-to-air, bed-connectivity, and lateral connectivity respectively.

A-4 That stream which: (i) contains all the properties mentioned above (ii) has appropriate (Swami Sanand's demand has always been for naisargika dhāra) flows all along always (both in velocity as well as volume) (iii) has continuous open-to-air, Bed-connectivity as well as lateral connectivity also has the property of (iv) longitudinal connectivity. It is then that we call such a stream as being aviral.

Clearly, satisfying the conditions of such an aviraldhāra is possible only in the event of absolutely zero human intervention, be it in principle or in reality. Under practical considerations, we will necessarily have to take appropriate decisions having considered the trade-offs involved, like we do when we build bridges.

A-5 It is common knowledge now that all the human civilizations took their birth in river valleys and got nourished in them. The reason for this is not the presence of water alone, but equally important is the creation of fertile soil, exchanges (between water, soil and air) and creation of the new (soil etc., conditions) which cannot be possible without aviralness. Maintaining the balance of underground water-table and by providing for drinking water and irrigation facilities during the lean months is not possible without the aviral-ness in the flows of the river. The greatest requirement of aviral-ness is for the aquatic life – be it hilsa fish, or dolphin or gharial-s (Gavialis gangeticus) or turtles, bacteria or insect-eating frogs.

A-6 Ganga-ji is a natural water stream, a river (as stated in A-1) and all those things that we stated from A-1 to A-5 are equally to applicable to Her as are applicable to every other river. Every river must have:at every moment in time as well as at every place where it flows the ecological/environmental flows along with those conditions required for aviralness like bed connectivity, longitudinal and lateral connectivity as well as opentoair etc. Is it the case that for Ganga-ji too, just this, that is satisfying the conditions of aviral-ness alone is sufficient? No! No!!

A-7 Ganga-ji has been accorded the most exceptional as well as the highest place amongst all the other rivers by all of our ancient cultures (Hindu, Buddhist, Jain,

Dravida, Tribal etc.). The way Ganga-ji remains etched in our psyche is all these following and more ways: Her story in Ramayana carries the oral memory of generations through the story of Raja Bhagirath and about Her being destroyer of papa (~sins) and giver of moksha; by relating her with the three principal deities - of creation, of maintenance and of destruction - Brahma, Vishnu and Maheshwara; in Bhagavadgita, as stated by Lord Krishna that amongst the rivers, He is Jahnavi (Ganga); in Adi Shankara's words: as the One who can remove illnesses-sorrows-tāpa-s(~afflictions)-pāpa-s; in the Purana-s, there are so many unrestrained stories that fortify Her as a Devi (super-human) and at other places as a human. If one asks any pundit, or someone knowledgeable of Sanskrit about the uniqueness of Ganga-ji, or what makes Her exceptional - then he would read out a number of sloka-s and will narrate a number of stories from the Purana-s and if you ask him about the basis for all this then he would say: śāstravachan, i.e., is on the authority of the Shastra-s. Possibly, he may as well add a few more sloka-s to buttress the point. I have faith in the Shastra-s but not foolish behaviour in the name of Shastra. Our ancestors have known through their experiences, their probings, and with their observations over years together about the unique and exceptional nature of Ganga-ji, Her waters, the alluvium brought by Her, the sediments deposited by Her at the bottom (bed), and the silt that is carried by Her to the banks as well as the exceptional nature of aquatic life in Her. They conveyed about these to their future generations who are unthinking and devoid of the wealth of experiences that they had by conveying that Ganga-ji and everything relating to Her are to be respected and protected as if it were a special boon granted by the divine. A few selfish Brahmins made Her into a character in Puranas. So be it, at least this foolishness has saved Ganga-ji from human mindless meddling all the time prior to the construction activities undertaken by Sir Proby Thomas Cautley in the 19th Century CE. Moreover, hilsa fish, susu or Ganges river dolphin (Platanista gangetica), and other Gangetic aquatic life, the fertility of the alluvium, sediment as well as silt brought by Ganga-ji, the undecaying, timeless nature of Gangajal (water of the Ganges), pollution -destroying, disease-destroying qualities of Ganga-ji were these not known to our ancestors from their longterm observation skills? -- All these were taught as well as shared with me by my father and grandmother who neither learnt science nor did they believe in Purana-s. Now, it is the task of the scientific researchers to study and analyse these qualities of Gangajal as well as the fertility of alluvium, sediment as well as silt (and sand, gravel, and boulders - because it is from these that the alluvium, sediment and silt form) brought by Ganga-ji and confirm them, establish appropriate scales to measure them and study the scientific causes behind the presence of such qualities and it is the task of the Governments as well as our Political leaders to inspire undertaking of such research and if need be get such research done by the researchers by way of a Government Order. Do we see such kind of research happen in appropriate measure? If it is not happening, why is it not happening?? Till the time such research does not take place, consider Gangaji also as yet another river

and hold her to the wheel of development to kill her??? What a strategy of our Government!!!

A8 From the above discussion, the following conclu-

sions become very clear:

(a) Gangajal is not like any other waters – they contain unparalleled undecaying, diseasedestroying, health enhancing, and pollution-destroying qualities which are

to be preserved.

(b) These qualities are because of the presence of suspended particles. If the flow of the water is disturbed, then these particles either get sedimented (such as in the case of a barrage or dam where they get sedimented before) or get destroyed (such as in the case of turbines).

(c) To preserve the unique qualities of Ganga-ji, aviral-

flow is a definite necessity

(d) Even to protect the aquatic life in Ganga-ji, aviral-

ness condition must be met.

(e) In order that at least some portion of the waters of Ganga-ji, with their very special and unique qualities, reach Gangasagar as well as to ensure protection of the various species of aquatic life in Ganga-ji, it is necessary to have minimum environmental flows at every place as well as at all times, in the flow of waters of Ganga-ji.

(f) The quality of Gangaial cannot be measured pair.

(f) The quality of Gangajal cannot be measured neither with the measures of quality of other normal waters such as pH (acidity), DO (Dissolved Oxygen), BOD (Biological Oxygen Demand), TDS (Total Dissolved Solids), FC (Free Chlorine), TC (Total Chlorine) nor by the measures given by such agencies as the Central Pollution Control Board (CPCB) or BIS (Bureau of Indian

Standards), EPA (United States Environmental Protection Agency) or WHO (World Health Organization). Waters treated with latest treatment mechanisms such as RO (Reverse Osmosis), UV (Ultra violet) do not become equivalent to the Gangajal. In order to test the unique qualities of Gangajal we need to establish new grounds and new standards. May it be remembered well that clear waters (nirmal jal – without any visible pollutants) cannot become Gangajal, the unique qualities of Gangajal are quite different as well as much superior and greater than clearness (nirmal-ta)

(g) This does not mean that there is no requirement for clearness (nirmal-ta) because the pollutants that are added to Gangajal have the capacity to influence even the natural characteristic qualities of Gangajal. What is of necessity is a proper assessment of the natural characteristic qualities of Gangajal as well as protecting and preserving them, by whatever means.

B Hydro-Electric Power – Development

B1 No action ever takes place without energy, whether it be action by living beings or physical bodies or chemical agents or natural forces. Also, the one and only source of energy for all things on our Earth is the Sun (In the sense that it is also the primal source of energy for all substances because in the ultimate analysis, even our Earth was a part of the Sun which got separated). This energy obtained from Sun is present, on the one hand, in all the solids and liquid substances in the form of chemical energy and also in the bowels of the earth

as heat/geo-thermal energy; on the other hand not just in the form of the rays of the Sun providing light and heat but also in the form of: wind energy caused because of the flow of the wind; energy in the waves, tides and refluxes of the sea; even the chemical energy that gets stored in plants, trees and shrubs is also sourced from solar energy. Even the physical energy (static or potential energy + dynamic or kinetic energy) present in the high velocity flows of waters from high mountains is also at its roots - a form of solar energy. The process of the energy present in the high velocity flows of waters being trapped with the help of turbine-generators and converting it into electric energy is called as hydro-electric power generation.

B2. The very purport of life is to be engaged in action. Since the advent of life in the universe, every living being has met the energy needs to accomplish their natural as well necessary actions through the chemical energy present within them which was generated either by way of photo-synthesis or by way of oxidation of the food they eat or other such chemical reactions. From the minutest micro-organisms to big and complex birds and animals, which includes human-beings, never required any other form of energy but this. Every being was able to fulfil all their needs on their own with the help of the bodily energy that was obtained by way of photo-synthesis or through the food they ate. There was little need for co-operation among majority of the beings except in such species like ants, bees or for the beings in their infant-stage. But, human species was the most intelligent among them all. What to say of the

intelligence that seeks ways to escape labour and when that were not possible, to escape physical labour has started the use of the brute-force of animals as well as human-slaves as a source for energy to get work done. As the progress of civilized living increased, the notion that the use of one's own bodily energy as well as that of the energy from brute-force was considered to be vile and along with it the consumption of energy also kept doubling by the day and quadrupling by the night. A variety of means of transport, not just electric bulbs or fans but A.C., mixer-grinder, oven, refrigerator, washing machine, vacuum cleaner, and a variety of products from factories. The more civilized you are, the more is the consumption of energy and yet there is no contentment and only desire for more - more - more. In such a state of affairs, it is no surprise that greedy eye fell on the waters from high mountains and utilizing them for hydro-electric power generation.

B3 Electricity could be generated from high velocity flows of waters or from waters falling down from sharp slopes of a high mountain directly by running a turbine with them – the electricity generated in the process is given by this formula: [volume of flow of water * (((velocity^2)/2) + g * height-difference)] In the mountainous terrains where the velocity of the flow and the height-difference (between the height from which the water falls and the place where the turbine is placed) is high, the volume of water is less and moreover the natural velocity of the flow is not found to be more than 3-4 metres/second (because of the friction with the bed as well as because of the flow against the

wind) and therefore the effective electricity that could be generated is dependent solely on: [volume of flow of water x height-difference] It is possible to generate electricity by way of passing the waters present in the naturally occurring waterfalls from atop a mountain directly through penstock pipes that are connected to turbines below - otherwise an artificial waterfalls has to be created by way of constructing a dam. The higher the dam, the higher the difference of height between the falls and the turbine location, the higher therefore is the electricity generation. However, the dam requires a proportional large lake as a reservoir that in turn submerges a large part of the land under it and whatever farmlands or forests present earlier in that land certainly get destroyed, people get displaced and the costs will certainly be huge. The example of Tehri dam is right in front us -- in which from Dharasu which is about 60 kilometres from the dam, where Bhagirathi-ji is turned to a flow-less, still lake, and this resulted in more than one lakh people being displaced, destroyed their agricultural land and property as well as destroyed a forest spanning a large area. Apart from this, the damage done to the ecology, forest-dwelling animals as well as migratory aquatic species will remain forever.

An alternate to building a huge dam was identified. The modus operandi of electricity generation in this method is as follows: With a dam/barrage of low height, water stream is diverted and sent through the mountain that is by the side — by way of boring a big underground pipe-tunnel (called Head Race Tunnel) in the

mountain for about 10-15 kilometres -- and running the water down a turbine, placed 100-250 metres below either near the same stream at a distance or any other stream, through the opening of the tunnel on the other side. Having made electricity thus, the waters are released into the stream below. In this method, one need not make a huge dam but it necessitated the boring of a huge tunnel in the nearby mountain. A lake (reservoir) was not required to be built, instead there was the problem of dealing with the debris that comes out on boring the tunnel which has to be deposited somewhere. The flow in the river was not severely disturbed but the contact of the waters with natural vegetation, aromatic plants and the open air is cut off. As it is the endangering of the aquatic life remains. Boring a tunnel of a large radius for a long distance in the mountain ranges results not only in disturbing the natural streams oozing out of the mountains but also result in new problems like instability of the mountains or in increasing the chances of landslides and avalanches in the higher regions of the mountain range.

B4 In spite of having all these difficulties and adverse effects, when the costs of negative effects on environment are not added to hydro-electric power, then certainly it becomes the cheapest form of electric energy sources (excepting its generation through brute-force of animals/humans). Though there is a huge initial capital cost to establish a hydro-electric power plant, since there are no huge maintenance costs involved, it turns out to be a source of plenty of almost free electricity. Even in this, it is important to note that in comparison

to other means of generating electricity, if one looks at the costs involved in establishing hydro-electric power plants, high costs are not with respect to machines, but in things like the construction of dams/tunnels which require huge labour and the cushioning provided to them – which are to the liking of Governments – because they provide employment to large number of people for years together. When the roads get made, then the entire region opens up to the rest of the world.

B5 A special feature of hydro-electric power lies in the ability to start the generation of electricity within minutes and whenever one desires so, to stop the generation of electricity too within minutes. Like when there is greater requirement of electricity (say between 6 PM to 11 PM), start generating electricity and stop the plant till the next day evening. The impact of this is to be found in the increasing ill-effects on the river downstream and on the very survival of aquatic life – like the impact caused by the project of Maneri-Bhali on the ghats of Uttarakashi or on the Triveni Ghat of Rishikesh by Tehri. Are there no costs calculated with respect to such instances?

C Ganga-ji and Hydro-Electric Power

C1 No major meddling with Ganga-ji or her source or other streams present in the current day Uttarakhand has ever happened even till the times of Mughal rule in India, though the drawing out of waters from Yamuna-ji through the construction of West Yamuna Canal started during the times of Akbar's reign, and

during the reign of Shahjahan, the waters of Yamunaji were diverted through this canal from Dakpatthar (near Dehradun) to Lal Qila via Kurukshetra, Karnal, Panipat and Chandni Chowk. In the 1820s (CE), English renovated this canal built by the Mughal Emperors and they also built an Eastern Yamuna Canal which carried waters to irrigate lands till Shahdara starting from Dakpatthar via Saharanpur, Shamli, Baraut and Baghpat. It was in the year 1840 CE that the English dared to meddle with Ganga-ji. The work towards building the first canal on Ganga-ji, diverting her waters, started in 1841 CE and was completed by 1846 CE. The fall of the terrain in the route of the canal was severe at some places than those required for the flow in the canal so much so that small waterfalls are found at such places like Pathri, Asafnagar, Mohammadpur etc.

C2 The Bhimgoda Head Works built under the leader-ship of Sir Proby Thomas Cautley was a weir with very low-height (about 1.5 metres) falling shutters and in order to raise the height of the weir during the times of less water, planks of about 0.5 metres height used to be erected. One side of the weir had a fish-ladder to let fish move freely to the surface and back into the waters. Towards the right, was the canal which used to pass by Har-ki-Pauri – and all the excess waters from the canal used to be released back into the Neel Dhara (main Ganges River at the Bhimgoda Head Works) from the Left banks through the gates of the planks. In this way, neither the aviral-ness was disturbed, nor did it cause any harm to the unique and special particles of Ganga-ji and the aquatic life did not face any diffi-

culty for their movement. The belief was this and to a large extent, it matched with the reality that the Gangnahar (Ganga canal) –passing from Roorkee, Deoband, Khatauli, Muradnagar till Bulandshahr – is the stream of Ganga-ji itself; it is with this same faith and belief that people take bath and do pūja there.

C3 Modernization of Bhimgoda Head Works took place between 1905-1910 to have a concrete dam and castiron sluice gates etc., and the Mayapur Dam was also built. The aviral-ness of Ganga-ji was broken - that too much before She reaches Har-ki-Pauri. After a few years of struggle, under the leadership of respected Shri Madan Mohan Malviya-ji, symbolically, Ganga-ji's aviral-dhāra at Har-ki-Pauri was restored but the canal downstream, and the Neel-Dhara - the original stream of Ganga-ji by the banks of which all the major Tirthas downstream are present, like Shukratal, Brijghat, Rajghat, Brahmavart, Shringverpur, Prayag, Varanasi etc., have all been deprived of the aviraldharaof Gangaii. (emphasis added by the translator) Devoid of the knowledge of the Ganga-tva (Ganga-ness - that essential quality that defines Ganga) or the unique properties of Ganga-ji, and neglecting the unique property of undecaying nature of waters of Ganga-ji in the stream below Haridwar - what difference would it make to our society that is foolish, greedy, and selfish and carries a blind faith in the stories from the ancient texts (and their professed Shastra-s) - all that they are interested in is to seek bail outs from the crises and to follow traditions.

C4 After the 1920s, the attention of British Government in India went in the direction of generating hydro-electric power and on the two big waterfalls present within the (upper) Ganga canal, hydro-electric power plants were made at Pathri and Muhammadpur - both these did not have a dam with a huge reservoir nor were there any tunnels. There was no question of Ganga-tva oraviral-ness in the canal and I do not think there was any harm caused because of the presence of power plants at these places. Between 1952-55, two of the smaller waterfalls upstream were levelled to have electricity made of the entire volumes of waters and with appropriate changes in design, the capacity of Pathri-HydroElectric-Power plant was tripled. At that time, I was studying in Roorkee, from where Pathri was just 18 kilometres away. I learnt my first lessons in the design and construction of hydro-electric power plants from there only.

C5 There were no hydro-electric power plants that were started/envisaged on any of the main streams flowing in the current day Uttarakhand even till 1960 CE, though in the Uttar Pradesh, the Sarda Hydro-electric power plant was started and an Hydro-Electric Power Department was started; I was associated with the Department and worked in a team involved in the construction of Rihand Hydro-Electric Power Project between 1954-1960 which fed on the waters stored in the reservoir of a huge concrete dam. In the last six months of 1960, I was working in the Central Design Directorate of Uttar Pradesh where my first contact with the idea of electricity generation from

Ganga-Yamuna happened, but this was a very basic, and mostly remained at the thought level. At the beginning of 1961 itself, I resigned from my service with the Government of Uttar Pradesh and joined as a faculty member at IIT Kanpur and very soon, I left the irrigation-hydro-electric power area and came to be called an environment-expert. But how will the earlier attachments leave altogether? I used to consult for irrigation and hydro-electric power plants. It is my misfortune that in 1978, when for the first time ever there was the first hydro-electric power project being built on any of the main streams of Ganga-ji - that is, the Maneri-Bhali Project on Bhagirathi - when it was being started, I was invited as an expert in construction-installation and I got the opportunity to stay for 15 days at the construction site in Maneri. If only I had the foresight to see the harmful effect that that project had on Bhagirathiji and opposed it right there. Maneri-Bhali was a tunnel project which destroyed the aviral-ness of Bhagirathi-ji and also caused a great degree of harm to the Ganga-tva present in Her waters. Now, the second phase of Maneri-Bhali project (Uttarkashi Dharasu) is also completed and now, starting from 1 kilometre above Maneri to below Tehri (nay-Koteshwar) of about 150 kilometres, Bhagirathi-ji is to been seen as a stream only for 2-3 kilometres in the ghats of Uttarakashi and at all the rest of the places, it is vanished either within the tunnels or in the form of lakes (reservoirs). What would happen if all the under-construction and proposed projects are completed??

Sacrificing Ganga-ji at the altar of Hydro-Electric Power!! Is it a big thing to put this mortal life at stake to stop such a disastrous possibility?

Not according to my thinking.

Swami Gyan Swaroop Sanand (formerly Prof. G.D. Agrawala) started his fast-untodeathon the 22nd June 2018 CE, that is, on Ganga Dussehra having not received any responses from the Prime Minister of India or the Government of India for his Open Letters written to the Prime Minister dt. 24th February 2018 CE and 13th June 2018 CE.

He wrote a third letter to the Prime Minister of India on the 5th of August 2018 CE which was sent through Sushri Uma Bharti ji to the PM Shri Narendra Modi.

In addition to this statement, Swami Gyan Swaroop Sanand wrote an educative article to reflect on the terms being used today as well as his observations on what is the way forward given the state we are in to preserve the sacredness and uniqueness of Ma Gangaji. They can be seen from the next page. It is these ideas that inform his directives/requests for action to/from the Prime Minister through his Open Letters as well as the Letter sent through Sushri Uma Bharti ji.

Nirmal-ta, Swaccha-ta, Pavitra-ta & Guṇavatta of Gangaji [An Article Collected on the 50th day of his fast-untodeath that he started on 22nd June 2018 CE] (Swami Gyan Swaroop Sanand wrote this on both sides of a page and left another blank page possibly to add to it. We will add to it as and when it is updated.)

The society these days, including the experts appointed by the Government, conducts a variety of research on Gangaji, predominantly focussing on Nirmal-ta and Swaccha-ta, as if they were one, owing to lack of depth and scientific understanding. However, in my child-hood, we used to always refer to Gangaji in terms of Pavitra-ta (~sanctity) only, never in terms of Nirmal-ta or Swaccha-ta. From a scientific viewpoint, Gangaji is a stream of water, and we need to discuss the quality/merit of Gangajal keeping that viewpoint in mind. So let's understand these four aspects:

- Whichever liquid is without any visible impurity i.e. transparent and colorless is considered nirmal i.e. clear. By this definition even white milk is not clear. And therefore, transparent cleansed salts, BOD or any bacteria are not factors for Nirmal-ta. It is measured only on the basis of color and turbidity.
- 2. Swacchata, i.e., cleanliness/purity is an ideal quality. It includes, not just the cognitions of the five sensory organs, but also the historical narrative. This cannot be measured. A well washed cloth is considered clean but not nirmal. The water contained in a dirty vessel or a vessel that is in the vicinity of garbage is not considered clean, even if there is no visible dirt in that. Thus, Swacchata- cleanliness goes much beyond simple nirmal-ta.

It cognizes the invisible impurities. One can remove the visible impurities in water by filtration or treatment, but one cannot get pure water. And well-being is the consequence of clean & pure water, not just by clear water.

3. Pavitra-ta (~sanctity) is the capability to remove dirt. It is not just absence of impurities. Our childhood references to Ganga water as sacred are not false, due to the following reasons: 1. Dr. D.S.Bhargava's research showed that Ganga water is capable by 1025% more, than regular water to destroy BOD. 2. NEERI research indicates that Ganga is capable of destroying the Coliform and bacteria. 3. According to research of Dr. S.Mayilraj from IMBT Chandigarh, Ganga is capable of destroying 20 species of bacteria. 4. According to Tulasidas and Adi Shankaracharya, Ganga is capable – though may not be physically verifiable – of nullifying not just diseases, curses and taap (~afflictions), but also sins.

It is this aspect, this capability to destroy impurity and sin, that is unique to Gangajal, this is the Ganga-tva. Restoring this Ganga-tva, as it was, should be deemed Ganga Rejuvenation. Just to let Ganga remain as is, would be Ganga-conservation. It must be noted that though not all of this 'Ganga-tva' is measurable, some are measurable.

4. Guṇavat-ta (~unique qualities): From the above discussion, it must be quite evident that it is not just senseless/pointless to consider, in isolation, of nirmal-ta or swaccha-ta but also a huge insult to Ganga-ji. Water in

wells, ponds, lakes or even bottled water can be clear, clean and pure; but would that make the Gangajal (waters of Ganga)? We must first determine the factors to measure the virtues of Ganga-water and that of sand and pebbles in its bed. It is indeed obvious that common factors such as pH (acidity), turbidity, DO (dissolved Oxygen), TDS (Total dissolved Solids), BOD (Biological Oxygen Demand), COD (Chemical Oxygen Demand), Coliform MPN (Most probable number), that are used to determine the quality of regular water will anyway be included (though their limits may be different). In addition, we must consider factors such as - BOD Destruction Rate Constant, Re-oxidation rate constant, Coliphage types and density, phages for clinical pathogen - types and density -- which are unique indicators of Ganga-tva, should also be considered and measured. All of this needs intense and wide research. At least 10% of the funds allocated to Ganga Rejuvenation or Conservation must be allocated for this research, which will in turn determine the nature of subsequent activities that are necessary.

- II. Things to be Done for Gangaji's Pavitra-ta & Guṇavat-ta (and for the stated Nirmal-ta & Svacchata):
- 1. Understand and accept, with firm conviction, that Gangaji's uniqueness i.e. its excellence and Pavitrata - comes from Himalayas. If that is destroyed or even reduced once, it cannot be recreated. Nor can it be increased. Had that been possible, we would have succeeded in establishing factories producing Ganga water!

- 2. It is essential to document Gangaji's Ganga-tva i.e. its unique qualities, at various locations and in various atmospheric conditions. Based on this, we must understand and document the reasons or factors that impact Ganga-ji's uniqueness, and based on this we must make due legislations for regulating activities on Gangaji.
- 3. It is absolutely essential to maintain the density and uninterrupted flow aviral flow and environmental flows (which is measured as per FDC i.e. Flow Duration Curve). In fact, these must be stringently imposed upon, immediately.
- 4. The external pollutants, that either get into the flow, OR are (wilfully) mixed with the flow be it public sewage or industrial waste or solid sediments or any other pollutants must be measured at the location and time of entry. It must be ensured that not more than 10% of such pollutants enter Ganga-ji. In fact, all cleansing activities sewage treatment, effluent treatment and sewage pumping, Municipal Waste Disposal must be carried out prior to dumping the pollutants in Ganga-ji; it must not be expected of Ganga-ji to perform such cleansing!
- The Ganga ministry must strictly control the entry points for these pollutants in Ganga-ji, and should neither bear the costs for such treatments nor participate in such activities.

APPENDIX XIV: APPEAL TO CONTRIBUTE TOWARDS CREATING A PROFESSOR G.D. AGRAWAL CHAIR AT IIT KANPUR

The legendary Professor Guru Das Agrawal, who got promoted from a Lecturer directly to Professor in 1971 at the prestigious Indian Institute of Technology at Kanpur after having finished his Ph.D. from University of California at Berkeley in two years and laid the foundation of India's anti-pollution regimen as the first Member-Secretary of Central Pollution Control Board, ultimately failed to convince a government about his viewpoint on rejuvenation of river Ganga and had to pay for this with his life. He died on 11 October, 2018 after 112 days of fasting on lemon water and honey, last three days of which were without any water at all.

Professor Agrawal was a deeply religious man but at the same time a meticulous scientist. He considered Ganga as his mother and considered that it was no ordinary river. He, like all Hindus, believed that water of Ganga has some special qualities because of which the river is considered holy as no other river in the world be it Nile, Euphratus, Thames, Danube, Missisippi or Indus. As a scientist he described these qualities as bactericidal, disease-curing, health-promoting, non-putrefying and

purifying properties which were at level more than in any other water.

Some remember him as a maverick colleague, some as a humane warden, some as a thorough professor, some as a devout saint and for the rest he is a legend. Some of his admirers have decided to institute a Chair in his name at IIT Kanpur and also possibly at UC, Berkeley. The amount to be raised for the Chair at IITK is Rs. 1.25 crores, of which Rs. 4,01,000 have been raised till 1 November, 2019.

This is an appeal to all to contribute towards this Chair so that his dream of an aviral (uninterrupted) and nirmal (clean) Ganga can be kept alive and some people can work towards his unfinished agenda. He wanted the work on hydroelectric projects on Ganga to be stopped, all sand mining in Ganga, whether illegal or legal, to be banned, prevent sewage flowing into it, whether untreated or treated, and all deforestation to be halted (for example, in the name of four lane highway Chardham project connecting Badrinath, Kedarnath, Gangotri and Yamunotri).

These demands may seem unjustified to some. We believe more research needs to be done to prove what he was saying and a Chair at IITK (and UC, Berkeley) could serve this purpose.

Kindly see the links for making donations using IIT, Kanpur website as well as details of people who have donated so far. https://iitk.ac.in/dora/funds/prof-gd-agarwalchair.php

https://docs.google.com/spreadsheets/d/1VK-CwuxkirfqaaRmfQ0j333AkZJAgwVbL8ntzTc6l82g/ edit#gid=0

भारतीय संविधान के मूल सुलेखन प्रति का 13वां चित्र महाबलिपुरम् मूर्तिकला के दृश्य (भगीरथ तंपस्या और गैगाबतरण)



स्वामी ज्ञान स्वरूप सानंद (संन्यास पूर्व: प्रो. जी.डी. अप्रवाल) [सा.ण. 20.07.1932 - 11.10.2018]



अपने रैगा तपस्या के अंतर्गत 6ठा आमरण अनशन करते हुए 112वं दिन अधिकारिक सूचन के अनुसार हदयथात से देहात अनशन का कारणः माँ गैगा जी की वर्तमान भीषण दुदशा के लिये तुशन अतिआवश्यक कदम उठान और उनकी अविरत्नता, प्रवाह तथा जल गाद तथा प्राणितच की गुणवत्ता सुनिश्चित करने के हेतु केन्द्र सरकार पर दवान बनाने के लिये 22 जून से जामरण अनशन

देखें http://gangatapasya.in संपर्क: 7382990835 केंद्रते हैं कि राजा नर्गास्त घीर तपणा कर रास्त्रतातपूर्वक गया को भारत कृष्टि पह लेकर आहे. । और दूस गेंगा को अपनी मी मानवद प्राप्तिकार परिचात (बी. डी.) तपाताल में वर्तमान शासन तब और शासकों की दुर्नीतियों में इतीड़ित अपनी मी को प्रकान के नियं उनके वैस्तर्गित त्यक्य, गेंगा का अजिल्ल और निर्मात, बनाय स्थान हुत मरस्वर से एक विधीवयम की मीत के संकर्भ की पूर्ति के लिए अपने प्राप्त मी त्याग दिए। ।

क लिए अपन प्राप्त मा त्यार एए ।

टर्जिंग मृत्यू संस्वार से हुई चुक या फिर कुर्यों का गुनीका है, इस पर
अन्तर्शन बहस की का सकती है । यर इसमें कोई शक नहीं कि सरकार तर्ग अन्तर्शन बहस की का सकती है । यर इसमें कोई शक नहीं कि सरकार तर्ग अपनाई गई पर्यावरण विरोधों और असनानता बहाने वाली नीतियों गोग को लाग करने और विकास के नाम गेगा की मिल लंगे में ही लगी है, जो स्वतंत्रता आदीतन से उपने हमार देश के साजवान देश अनिवार्य बताये गये मोलिक अधिकार ने पत्य मीति के निदेशन निर्माण का गोया-सीधा उल्लेखन करली हैं । जन स्था प्राप्तिकार साजवान है कि लग नाम पूर्व सरकारों, शिक्षण, एल्झात

वय उसका प्रासीयम्प पह है कि हान जान पूर्व तरकार्गा, शिक्षम, एउमार प्रयोजरण विश्वपन, सिन्मुझर नागरिक व गैया सता को सहावारी देन के अन्य में उनके अपण समनों को किसे पूरा करेंगे इस पर ध्यान दें। सबसे बड़ी बात है कि ये जिसमें विश्वास करने थे उसके लिए अपनी बात भी देश को तैयार हो गए।

पत्न गार पन् ताबालार ने उत्तर नृता.
'दस अक्टूबर से मैं जल भी छोड़ दूगा: दशहरे से पूर्व मेरा
प्राणांत हो जाएगा । मेरा प्राणांत हो जाने से मुझे कोई
अफसोस नहीं होगा । पर मेर प्राणों का अंत गैंगा को
बचाने के प्रयासों का अंत नहीं होगा ।'

प्राप्तान वो.ही. अप्रवाल के रूपेनों की एवं करने के लिए हा हमें बहुत नाम करना होगा । अभी इस समय क्षेत्रिय वह है कि हम अपने का पाद दिल्हा कि हमारे खेंब्यान में बनीर ए की सन्यता, समानेता व प्रपायरण का जेकर दिना समाहित की गई है जिससे हमार प्रिय प्राप्तानर जी.ही. अस्पान की क्षेत्रण मिली ।

हमारा भारतवासियों को आहवान है कि स्वामी सानंद के गैंगा संरक्षण के अपूर्ण प्रयास को पूरा करने के लिए गैंगा और गैंगल बचाने के अभियान से जुड़ें ।

An obituary for Swami Gyan Swaroop Sanand, published in the Dainik Jagran Sandeep Pandey's 'The Tradition of Saints Sacrificing their Lives for the Ganga' is the story of the modern-day Bhagiraths who gave their lives to protect the "aviral" and "nirmal" Ganga Ma. They gave their lives so that the Ganga lives. As long as the Ganga lives, India lives. These are stories on which the mainstream media has been silent. India will be grateful to the saints for their sacrifice. I am grateful to Sandeep for not letting us forget their sacrifice.

- Dr. Vandana Shiva

A true condolence to Professor G.D. Agrawal would be to brace ourselves for the fight against governments which believe in a concept of development with attendant destruction of nature, corporations which implement such misplaced and misgoverned ideas of governments, and contractors plundering our natural resources including sand from the riverbed and the catchment—all three insensitive to human beings in the name of 'development'.

- Medha Patkar

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